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Britain's gilt complex

The EU drifts eastward

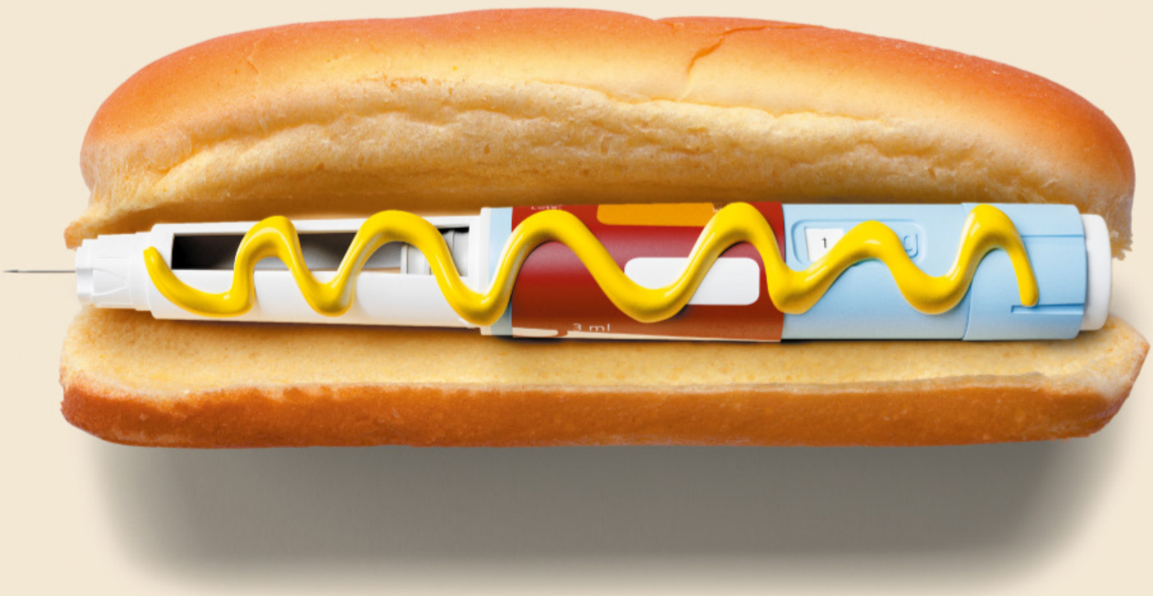
DeSantis's elusive foreign policy

Rainforests need laws, not saws

MARCH 4TH–10TH 2023

EAT INJECT REPEAT

Curing obesity, worldwide



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LEVELLING UP

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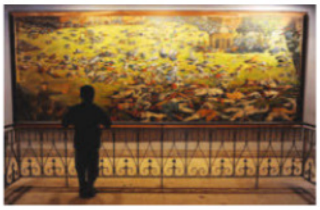

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to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

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The world this week Politics

Bola Tinubu, the candidate of the ruling All Progressives Congress, won **Nigeria's** presidential election. International observers said that the vote "fell well short of Nigerian citizens' legitimate and reasonable expectations" after polling stations opened late or did not open at all, and an electronic system for transmitting results did not work.

France is to reduce its military presence in **Africa**, taking a back seat to forces from host countries, which will co-administer bases. Emmanuel Macron, France's president, announced the policy ahead of a trip to Gabon, Angola and the two Congos.

America has supplied 61 tonnes of arms and ammunition to **Somalia**, stepping up its support for government forces fighting al-Shabab, a jihadist group associated with al-Qaeda. Meanwhile, local tribes in Somalia are fighting the armed forces of Somaliland, a breakaway region.

The Financial Action Task Force, an international watchdog, placed **South Africa** on its grey list of countries that are failing to prevent money-laundering and the financing of terrorist groups. The listing makes it more expensive for South African banks and companies to do business abroad.

Ivory Coast and Guinea dispatched aircraft to bring home hundreds of their citizens from **Tunisia** after the president, Kais Saied, accused them and other migrants from sub-Saharan Africa of bringing crime to the country, and of being part of a conspiracy to change Tunisia's demography.

The International Atomic Energy Agency found uranium enriched to 84% purity, which is almost weapons-grade, at **Iran's** nuclear site at Fordow. Iran claimed that "unintended fluctuations" in enrichment levels may be to blame. A senior Pentagon official said that the time Iran would need to make one bomb's worth of highly enriched uranium had gone from about 12 months to around 12 days.

Israeli settlers attacked the **Palestinian** town of Hawara in the West Bank after two settlers were shot dead by a Palestinian gunman. An American-Israeli was later shot and killed near the city of Jericho. Israeli and Palestinian security delegations met in Jordan to try to stop the unrest before Ramadan begins in March.

Nayib Bukele, the president of **El Salvador**, opened a Centre for the Confinement of Terrorism, holding up to 40,000 inmates. The opening came a year after Mr Bukele introduced a state of emergency to deal with a spate of gang violence. Now 2% of Salvadorean adults are behind bars.

Vietnam has appointed a new president, weeks after the country's supreme leader, General Secretary Nguyen Phu Trong, purged its leadership in an anti-corruption drive. The national assembly elected Vo Van Thuong to the largely ceremonial role with 98.4% of the vote.

State media in **North Korea** reported that Kim Jong Un, the country's dictator, had ordered officials to bring about a "fundamental transformation" in agricultural production at a big meeting of the ruling party's central committee. Reports suggest that North Korea is suffering its worst food shortage since the 1990s.

Nepal's ruling coalition seemed to be near collapse because of a row between its communist members over the presidential nominee of the prime minister, Pushpa Kamal Dahal, who is also communist. The government came to power late last year. The Himalayan country has had 11 governments since abolishing the monarchy in 2008.

Foreign ministers from the **G20** countries gathered in Delhi for a summit. The EU wanted the meeting to condemn Russia's war in Ukraine; China and others resisted. Reflecting on the disagreement, Russia said that "balanced consensus decisions should be made in the interests of all humankind."

The irony

Rishi Sunak, Britain's prime minister, struck a deal with the European Union to solve the mess of **Northern Ireland's** trading arrangements following the United Kingdom's departure from the bloc. Among other things, the "Windsor framework" introduces a network of "green" lanes to reduce the red tape on goods coming from the mainland. Mr Sunak talked up Northern Ireland's "unbelievably special position" of being in the single market, a position that was enjoyed by all the UK until Brexit.

Janet Yellen, America's treasury secretary, visited **Ukraine** shortly after the Biden administration placed new sanctions on Russian companies. It also in effect banned imports of Russian aluminium by slapping a 200% tariff on the product. Ms Yellen is backing a huge package of support for Ukraine from the IMF.

Finland's parliament voted to join **NATO**. Hungary and Turkey are the only NATO members still to approve the applications of Finland and Sweden. Talks with Turkey will resume on March 9th. Meanwhile, Finland began building a fence along part of its border with Russia to stop Russians who are fleeing the draft from crossing.

At least 63 **migrants** died off the coast of southern Italy when their boat hit rocks. Many more are thought to have also perished. The number of people killed or missing trying to enter Europe illegally by crossing the Mediterranean has risen above 2,000 annually in recent years, according to the UN, though that is far below the more than 5,000 recorded in 2016.

A passenger train collided with a freight train near Larissa in **Greece**, killing scores of people. It was the country's worst rail disaster.

After nearly three years, **Hong Kong** ended its mandate to wear masks in public. The move is part of an effort to rejuvenate the financial centre and woo back tourists.

Will we ever know?

The question of **covid-19's origin** was raised again in America. Press coverage claimed that a classified report by the Department of Energy concluded, with "low confidence", that it most likely arose from a laboratory leak in China. And Christopher Wray, head of the FBI, said it was "most likely" that covid originated in a Chinese government-controlled lab.

Lori Lightfoot lost her bid for re-election as mayor of **Chicago**. She took just 17% of the vote, putting her out of contention for the run-off in April. Ms Lightfoot's popularity plunged amid a rise in violent crime. The two contenders in the run-off are Paul Vallas, a tough-on-crime candidate backed by the police, and Brandon Johnson, who is supported by the teachers' union.

Goldman Sachs held an investors' day, its first in three years, amid grumbling from shareholders about the direction of the bank after a slump in profit last year. David Solomon, its chief executive, raised the possibility of selling parts of its lossmaking consumer services after it has finished scaling back the division. It has become clear "that we lacked certain competitive advantages" in the business, he said. Markets were left unimpressed by the presentation. Goldman's share price fell after the event.

Tesla held its first ever investor day, at which Elon Musk outlined part three of his "Master Plan" for the company. Senior executives also took part and said an electric car for the mass market was in the works, which is essential for Tesla's sales ambitions. But the lack of detail about the new model disappointed investors.

Tesla also confirmed that it is building its first factory in **Mexico**, in Monterrey. It is the latest carmaker to invest in making electric vehicles in Mexico; in February BMW said it would expand production and build a factory to assemble batteries. Mexico is benefiting from the huge green subsidies in America's Inflation Reduction Act, $34bn of which is earmarked for smoothing the supply chain for EVs.

The euro zone's annual **inflation** rate remained virtually unchanged in February at 8.5%, though the reading was higher than the 8.2% that economists had expected. Core inflation, which strips out volatile food and energy prices, increased to 5.6%. Inflation also rose in the currency bloc's two biggest economies, Germany and France, adding to pressure on the European Central Bank to continue raising interest rates.

A measure of **factory activity in China** grew at its fastest rate in a decade, suggesting that the economy is bouncing back from covid-19 lockdowns and other restrictions. The official purchasing managers' index for manufacturing registered 52.6 for February, up from 50.1 in January (a reading over 50 means manufacturing is growing). The news triggered a rally in Hong Kong's stockmarket.

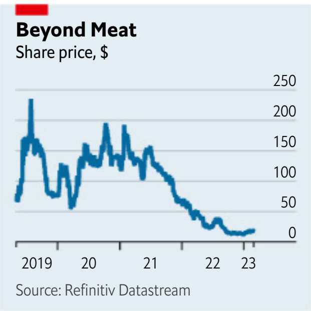
America's three main **stockmarkets** declined in February. The S&P 500 was down by 2.6% and the NASDAQ composite by 1.1%. Both indices are still up for the year. The Dow Jones Industrial Average fell by 4.2% in February; it has dropped by over 1% so far this year.

Sorting out the greenwashing

The European Commission announced that an agreement had been reached on its proposed standard for EU **green bonds**. Companies that want to promote their bonds as climate-friendly will have to ensure that the investments meet strict sustainability requirements. It is not yet clear what the penalties will be if companies' bonds don't meet the new standards.

Sweden's economy shrank by 0.9% in the last three months of 2022 compared with the previous quarter. The country is expected to fall into recession this year as soaring prices and higher interest rates knock consumer spending. House prices are falling sharply. **Finland's economy** did fall into recession in the fourth quarter, contracting by 0.6% after a 0.1% decline in the third quarter.

An accounting charge on stock-based compensation caused **Zoom** to report its first quarterly loss since 2018. The video-conference company's revenue grew by just 4%, year on year. A year earlier sales were still growing by 20%.



Source: Refinitiv Datastream

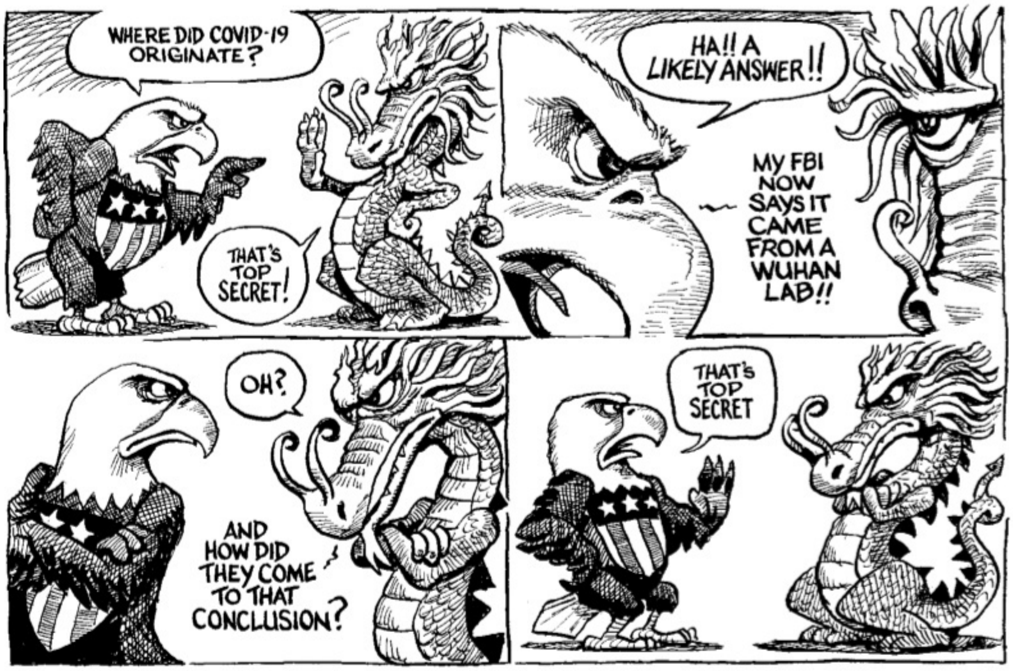
The share price of **Beyond Meat** fell back, having rallied after it produced better forecasts for the year than expected. Its stock is up by 38% since the start of 2023, even though revenue fell by 20% in the fourth quarter, year on year, and it made another net loss. Sales for the alternative-meat industry were butchered last year, in part because fake meat hasn't lived up to the hype of being as tasty as the real thing.

Ocado reported another big annual loss. Revenue from its online-groceries business in Britain fell. It had more customers but they put fewer items in their baskets: 46 on average, down from 52 in 2021.

International Airlines Group, the owner of **British Airways**, made its first annual operating profit since the start of the pandemic: €1.3bn ($1.4bn). Passenger revenue soared to €19.5bn from €5.8bn in 2021. IAG expects profit to climb.

Come fly with me

Cathay Pacific began giving away free return flights to Hong Kong to residents of South-East Asia as part of the city's campaign to lure back tourists after lockdown. The government is making 500,000 tickets available. Cathay is providing 80,000. Hong Kong's main airline has had a turbulent few years, from being ensnared in pro-democracy politics to coming close to collapse amid covid restrictions. But business is taking off again. Cathay flew 1m passengers in January, up by 4,000%, year on year.


WHERE DID COVID-19 ORIGINATE?
THAT'S TOP SECRET!
HA!! A LIKELY ANSWER!!
MY FBI NOW SAYS IT CAME FROM A WUHAN LAB!!
OH?
AND HOW DID THEY COME TO THAT CONCLUSION?
THAT'S TOP SECRET

Eat, inject, repeat

New drugs could spell an end to the world's obesity epidemic

A new type of drug is generating excitement among the rich and the beautiful. Just a jab a week, and the weight falls off. Elon Musk swears by it; influencers sing its praises on TikTok; suddenly slimmer Hollywood starlets deny they have taken it. But the latest weight-loss drugs are no mere cosmetic enhancements. Their biggest beneficiaries will be not celebrities in Los Angeles or Miami but billions of ordinary people around the world whose weight has made them unhealthy.

Treatments for weight loss have long ranged from the well-meaning and ineffective to the downright dodgy. The new class of drugs, called GLP-1 receptor agonists, seems actually to work. Semaglutide, developed by Novo Nordisk, a Danish pharmaceutical firm, has been shown in clinical trials to lead to weight loss of about 15%. It is already being sold under the brand name Wegovy in America, Denmark and Norway and will soon be available in other countries; Ozempic, a lower-dose version, is a diabetes drug that is also being used "off label" for weight loss. A rival GLP-1 drug, made by Eli Lilly, an American firm, is due to come on sale later this year and is more effective still. Analysts think the market for GLP-1 drugs could reach $150bn by 2031, not far off the market for cancer drugs today. Some think they could become as common as beta blockers or statins.

The drugs could not have arrived at a better time. In 2020 two-fifths of the world's population were overweight or obese. By 2035, says the World Obesity Federation, an NGO, that figure could swell to more than half, with a staggering 4bn people overweight or obese. People everywhere are getting fatter. The populations putting on pounds the fastest are not in the rich West but in countries like Egypt, Mexico and Saudi Arabia.

These trends are alarming because obesity causes a host of health problems, including diabetes, heart disease and high blood pressure, as well as dozens of illnesses such as stroke, gout and various cancers. Carrying extra weight made people more likely to die of covid-19. And then there is the misery that comes from the stigma associated with being fat, which affects children in schools and playgrounds most cruelly of all.

The consequences of obesity for the public purse and the wider economy are large. According to modelling by academics the annual cost to the world economy of excess weight could reach $4trn by 2035 (2.9% of global GDP, up from 2.2% in 2019). That includes both spending on health care and working time lost to illness and premature deaths tied to obesity.

The world's expanding waistlines are not a sign of the moral failure of the billions who are overweight, but the result of biology. The genes that were vital to helping humans survive winters and famine still help the body cling on to its weight today. The superabundance of hard-to-resist processed foods in recent decades has brought greater convenience and lower costs, but also triggered overeating just as lifestyles became more sedentary. Once the fat is on, the body fights any attempt to diet away more than a little of its total weight. Despite the $250bn that consumers around the world spent on dieting and weight loss last year, the battle to get slim was largely being lost.

The new obesity drugs arrived by serendipity, after treatments meant for diabetics were observed to cause weight loss. Semaglutide mimics the release of hormones that stimulate a feeling of fullness and reduce the appetite (see Briefing). They also switch off the powerful urge to eat that lurks inside the brain, waiting to ambush even the keenest dieter.

With the jabs already in high demand, investors are nearly as giddy as newly slim users. The market capitalisation of Novo Nordisk, the firm at the front of the gold rush, has doubled in two years, to $326bn, making it the second-most-valuable listed drugmaker in the world (see Schumpeter). Analysts expect half of obese Americans who seek help to be on GLP-1 drugs by the turn of the decade. But, as with any new medicine that holds so much promise for so many, there are uncertainties. Two big ones will be safety and affordability.

Consider safety first. The newness of these drugs means that their long-term consequences are not yet known. For the lower-dose forms prescribed for diabetes, the side-effects, such as vomiting and diarrhoea, have been mild. But others could crop up as the drugs are used more widely and at higher doses. Animal studies have shown a higher incidence of thyroid cancer, and semaglutide is associated with a rare pancreatitis. Little is known about the effects of using them during or just before pregnancy. All this will require careful analysis through controlled longitudinal studies.

Understanding these risks will be important, because many patients who take the drugs may need them for the rest of their lives. As with ditching a diet, stopping a high dose of semaglutide is associated with much of the lost weight piling back on. Some people even gain more weight than they lost in the first place.

Another preoccupation for policymakers is cost. In America the bill for Wegovy runs at around $1,300 a month; for Ozempic about $900. Judged by such prices, lifelong prescriptions look forbiddingly expensive. The longer view, however, is more encouraging. In time, companies may strike deals with governments and health providers to cover the whole population, ensuring high volumes in return for low prices. The prospect of profits is already luring competition and spurring innovation. Amgen, AstraZeneca and Pfizer are all working on rival drugs; Novo Nordisk has a full pipeline of follow-on drugs. Further ahead still, patents will expire, enabling the development of lower-priced generics.

The shape of things to come

What to do in the meantime? Governments must ensure that those who most need the drugs get them, leaving those taking them for cosmetic purposes to pay out of their own pockets. The long-term effects must be carefully studied. States should keep pressing other anti-obesity measures, such as exercise, healthy eating and better food labelling, which may help prevent people from getting fat in the first place. But spare a moment to celebrate, too. These new drugs mean that the world's fight against flab may eventually be won. ■

Brexit and Northern Ireland

Take the deal

Both the Tories and the Democratic Unionist Party should support Rishi Sunak's deal

BREXIT WAS bound to be difficult for Northern Ireland, since it has the UK's only land border with the EU. All sides agreed that a hard north-south border with customs controls risked upsetting the peace process that culminated in the Good Friday Agreement of 1998. Yet if Britain left the EU's single market and customs union, a border had to go somewhere.

Boris Johnson opted to take Great Britain out of the single market and customs union but to leave Northern Ireland, in effect, in both. That necessitated an east-west border in the Irish Sea, even if Mr Johnson pretended otherwise. When controls were duly imposed, he was characteristically quick to disavow his deal. He later brought in a parliamentary bill to let the government tear up parts of the protocol that created the border.

It has fallen to Mr Johnson's successor-but-one, Rishi Sunak, to clear up this mess. He and the EU have been sensibly pragmatic. The "Windsor framework" he has agreed upon with Ursula von der Leyen, the European Commission's president, hugely simplifies the customs controls still needed. A system of "green" lanes for trusted traders will minimise checks on goods not intended to move into the EU single market, helped by granting EU officials access to real-time trade data. And a new "Stormont brake" creates an emergency guard against unwanted single-market rule changes in Northern Ireland, even if it will be hard to use (see Britain section).

Because the deal eliminates many unnecessary checks, it will be welcomed by many businesses and ordinary voters in the province. Yet Brexit ideologues in the Conservative Party, along with many in the Democratic Unionist Party (DUP), are unhappy because Mr Sunak has not secured significant changes to the treaty text and has conceded that the European Court of Justice, the ultimate arbiter of single-market rules, will still have some jurisdiction in Northern Ireland. He is also dropping Mr Johnson's bill to rip up the protocol.

Both groups of opponents should reconsider. Hardline Tory MPs who dislike Mr Sunak's deal have not offered a serious alternative. Sticking with the status quo disrupts trade and could trigger renewed litigation. Persisting with the bill to allow unilateral repudiation of the protocol would break international law and envenom already poisonous relations with the EU.

It is harder to satisfy the DUP, which complains, accurately, that the protocol puts barriers between Northern Ireland and the rest of the UK. That gave the DUP the excuse to boycott the province's power-sharing executive. Yet it should be remembered that Brexit, which the DUP backed, was rejected by a majority of Northern Irish voters. Most support a better-functioning protocol that gives Northern Ireland unfettered access to the EU and UK markets. Mr Sunak's deal does not give the DUP all it wanted. It could still be improved by a veterinary agreement with the EU that would further reduce checks on food. But if the party rejects the deal, it will not get a better one. It should accept this as the best available. And that should clear the way for its return to the power-sharing executive.

Moreover, the deal is good for Britain as a whole. Armed with his protocol-busting bill, Mr Johnson believed that he could twist EU arms. In fact, the patient collaboration between Mr Sunak and the commission has improved UK-EU relations more broadly. That will allow Britain to become an associate member of the EU's Horizon research programme. It should bolster security and foreign-policy co-operation, something that matters more since Vladimir Putin's invasion of Ukraine (see Charlemagne). Better relations with France could even boost bilateral co-operation to deter migrants from crossing the channel in small boats. And the deal would do much to repair Britain's relations with America, whose president cares deeply about peace in Northern Ireland. When MPs come to vote on Mr Sunak's framework, they should wholeheartedly support it. ■

Bangladesh

Delta force

Politics and corruption are growing threats to a development superstar

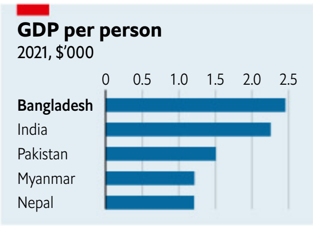
FEW COUNTRIES have confounded their doomsayers as satisfyingly as Bangladesh. The "basket case", in Henry Kissinger's noxious phrase, that emerged in 1971 from the ravages of the second India-Pakistan war was widely considered a failed state in the making. It was poor, overcrowded, badly run and prey to violent cyclones and the vicissitudes of the great rivers meandering across it. Yet Bangladesh celebrated its first half-century in 2021 as a secular democracy, a model of frugal social development and South Asia's standout economic performer.

Thanks to the dynamism of its activists, the country has long embraced progressive social policies. They have brought advances in particular for women and girls, who are more educated, likelier to be employed and have fewer and healthier children than their counterparts in India (let alone Pakistan). On the back of such progress, and a garments industry that was a winner from China's rising labour costs, economic growth picked up. As we explain, in the ten years before covid-19 struck, Bangladesh grew at an annual rate of 7%, not far off China's 8% (see Asia section). Its GDP per head at market prices, of about $2,500, is higher than India's. In 2026 it is due to be promoted from the UN's ranks of least developed countries. Its ambition to be an upper-middle-income country by 2031 should be plausible.

However, those prospects are now clouded. Beset by conditions that afflict many developing countries, including rising import costs, scarcer capital and balance-of-payments pressures, Bangladesh was forced in January to secure a $4.7bn loan from the IMF. It is not nearly as straitened as crisis-ridden Pakistan or Sri Lanka, but it ought to be held to a higher standard.

To maintain its progress Bangladesh will require a step-up in its economic performance. Yet its troubles have exposed structural and political weaknesses that point in the other direction: to a serious risk of deterioration.

Bangladesh is over-reliant on garments, which make up about 85% of its total goods exports. They may soon lose the preferential trade terms associated with Bangladesh's least-developed status, even as competition from lower-cost producers such as Cambodia is rising. And Bangladesh's efforts to diversify into higher-value-added industries, such as pharmaceuticals and electronics, are unimpressive. They are hampered by graft, red tape, difficulties in obtaining credit and a relentless brain drain, all of which have a common cause: the corrupt and controlling regime of Sheikh Hasina, the prime minister since 2009.


GDP per person
2021, $'000

Almost every area of the economy is touched by her bid to turn Bangladesh into the one-party state envisaged by her assassinated father, Sheikh Mujibur Rahman, the country's first president. Access to jobs, permits and government contracts runs through the ruling Awami League. Many domestic banks are thinly disguised shell operations, designed to funnel loans to the well-connected. Foreign direct investment has begun to flag in the past few years; the country's ratings for doing business are the worst in South Asia. In an election due early next year, violence is looking increasingly likely as Sheikh Hasina's beleaguered opponents take to the streets.

The 75-year-old prime minister's commitment to strong government is not irrational. Bangladesh has suffered spasms of instability, including 29 attempted military coups. Still, she has taken authoritarianism to its limit in a society with deep traditions of pluralism and debate. Easing her party's grip is the necessary next step towards building a more durable governing culture and, it might be added, to securing her family's legacy and perhaps its safety. It is also essential to restoring the independent institutions that will be the foundation for the country's future growth—which is likely to be harder to generate than its growth so far.

Western governments are reluctant to apply pressure. They doubt they have much influence with Sheikh Hasina and are wary of China's growing investments in Bangladesh. Yet they have more sway than they know. Members of the country's elite prize their links with the West, from business opportunities to educating their children; and Bangladesh relies more on foreign capital than in the past.

The stakes are high. As the climate warms, the environmental threats to Bangladesh are outpacing its progress. Assuming a temperature rise of 1.5°C above pre-industrial levels, the country could see 13m climate migrants and a third of its agricultural output wiped out by 2050, says the World Bank. Such a disaster could destabilise an acutely sensitive region. It could even make Mr Kissinger look prescient. If it is to mitigate that risk, Bangladesh cannot afford to become mired in oppressive one-party politics. It needs to get richer quicker. ■

Tech investing

Back to its roots

A slump is encouraging venture capital to rediscover old ways

UNTIL LAST year, venture capital (VC) had been riding high. With interest rates close to zero and little yield to be found elsewhere, large companies, hedge funds and sovereign-wealth investors began ploughing cash into startups, sending valuations upwards. In 2021 alone the amount of money flowing to startups doubled to nearly $640bn. Then soaring inflation and surging interest rates brought the market crashing down. Last year the investments made in startups worldwide sank by a third. Between the final quarter of 2021 and the same period in 2022, the valuations of private startups tumbled by 56%.

The downturn inevitably draws comparisons to the dotcom crash of 2000-01, when deep winter set in and VC investments froze. Luckily for both founders and their backers, conditions are not so frosty today. Startups' balance-sheets are stronger than they were 20 years ago; valuations are not quite so detached from revenues. In America alone, venture capitalists have about $300bn in dry powder. Nonetheless, the industry that is emerging from the tech slump and into an era of dearer money looks different from the one that went into it (see Business section). In many respects, VC is returning to the ways of decades past.

One change is a focus on small, profitable firms. This is a habit venture investing sometimes forgot in the boom years, when rapid growth and the hope of big profits tomorrow were prized over profits today. Many backers who were in search of a quick return piled into older, "late-stage" startups, which would probably go public soon and seemed assured of heady valuations.

Today, however, stockmarkets are volatile, making it hard for venture investors to gauge the value of late-stage startups. As interest rates have risen, lossmakers have fallen out of favour: according to an index compiled by Goldman Sachs, the stock prices of unprofitable tech companies have fallen by two-thirds since November 2021. VCs, too, are telling their portfolio firms to tighten their belts and generate cash. Increasingly their new bets are on younger firms, and those which are cutting costs sharply and likely to turn a profit sooner.

A second shift is a renewed emphasis on strategic firms. In an echo of VC's earliest days, when investors often backed semiconductor-makers that vied to win huge public contracts, many today are eyeing up firms in areas that stand to gain from governments' new fondness for industrial policy. Administrations in both America and Europe, for instance, plan to spend hundreds of billions of dollars supporting chip firms and clean tech.

Venture capitalists, understandably, know how to spot an opportunity. Andreessen Horowitz, a stalwart of Silicon Valley investing, has launched an "American Dynamism" fund that partly invests in firms which tap support from Uncle Sam. Other venture investors, including Temasek, a Singaporean sovereign-wealth fund, say they increasingly expect their investments to align with states' strategic aims.

A final shift in VC's approach is an emphasis on better governance. In the boom years too much venture money chased too few good investments. The mismatch gave founders the upper hand in negotiations, helping them keep oversight relatively light. After the spectacular blow up last year of FTX, a venture-backed crypto exchange, it became clear that none of FTX's big venture- and sovereign-fund investors had taken seats on the startup's board, leaving Sam Bankman-Fried, the founder, and his colleagues entirely to their own devices.

Now venture finance is harder to come by. Tiger Global and other funds that were previously hands-off have started to retreat. Other investors say they intend to take up their board seats. That reduces the power of founders to dictate terms and should improve governance. A lack of venture dollars may also encourage startups to go public sooner, as might trustbusters' greater scrutiny of big tech acquisitions (see Free exchange). The knowledge that they might soon face scrutiny in the public markets could also discipline founders.

Planting the seed

This new sobriety will not last for ever. Venture capitalists are, by nature, excitable: look at the buzz over generative artificial intelligence. Some hedge funds have left venture investing after previous downturns only to return when valuations adjusted. In time the cycle will surely turn once more, sending VC investments to dizzying heights. For the moment, though, the old ways are back—and that marks a welcome change. ■

Rainforests

Cash for climate services

Paying locals to conserve rainforests is essential, and possible

Profits from chopping down rainforests are surprisingly meagre. The land is not particularly fertile. A freshly cleared hectare of the Amazon fetches an average price of only around $1,200. By contrast, the social costs of clearing it are immense. Some 500 tonnes of carbon dioxide are pumped into the atmosphere. By a conservative estimate, that does $25,000 of harm by accelerating climate change.

Yet still the world's trees are disappearing. The area covered by primary rainforest has dwindled by 6.7% since 2000. The senseless destruction continues because, for the men wielding the chainsaws, it is not senseless at all. They receive the profits; the costs are dispersed across all 8bn people on the planet. Plainly, if the owners of the rainforest were paid not to destroy it, everyone would be better off. The world would no doubt already have funded such a deal, were rainforests in places with clear property rights and a firm rule of law (see International section). Alas, they are not. Rules against deforestation are usually strict, but seldom enforced.

Consider Brazil. Until January it had a president, Jair Bolsonaro, who sided with illegal loggers and ranchers. He torched the environment ministry's budget, stopped fining forest criminals and told illegal miners on indigenous reserves he would legalise their plunder. On his watch the pace of deforestation rose by 60%. Voters have replaced Mr Bolsonaro with Luiz Inácio Lula da Silva (see Americas section) who is pursuing eco-criminals. But catching them is hard.

Local officials are often in league with the loggers, and may be loggers themselves. Local communities often resist the forces of law and order, since they see more benefit from deforestation than conservation. The forest's remoteness makes it hard for police to penetrate. And land titling is a mess—in parts of the Amazon overlapping claims add up to five or six times the disputed area. When it is unclear who owns a piece of land, it is unclear whom to pay to conserve it, or whom to fine for despoiling it.

Similar obstacles impede conservation elsewhere. Forests in the Congo basin have long been protected by the region's dire poverty. Unable to afford chainsaws, local farmers chop trees down slowly and laboriously by hand. But deforestation is accelerating, and if it is mechanised before local governments can regulate it, calamity will follow. The prospects are especially grim in the Democratic Republic of Congo, where vast tracts of rainforest are overrun by militias and are almost wholly lawless.

The presidents of Brazil, Indonesia and Congo, the three countries with the biggest rainforests, are urging rich countries to bankroll conservation. France's president, Emmanuel Macron, co-hosting a forest summit in Gabon this week, promised to do his bit. Activists and consumers can help: after a concerted campaign, four-fifths of Indonesian palm-oil-refining capacity is now forest-friendly. But more effort is urgently required.

Leadership matters. Little progress is possible when countries with rainforests are run by the likes of Mr Bolsonaro. Yet even under better leaders, such places will struggle to enforce their own laws unless the people who live in the forests see benefits in conserving them. That will require a big, reliable flow of cash to make rainforests more valuable intact than flattened. This should come from rich-country governments and from private firms buying carbon credits to offset their own emissions.

In the past such flows have been too small and ill-designed. Rather than financing lots of small projects, which are hard to monitor, more money should go to political entities large enough to make a difference, such as state or provincial governments. Such "jurisdictional" carbon credits could be used to accelerate the transition to a greener local economy, to clean up local land registries and to police infractions. If there is enough cash, conditionally disbursed, locals will have more incentive to protect trees and less inclination to elect environmental renegades. By one estimate, $20bn a year would slow deforestation significantly. To preserve such a huge carbon sink—never mind the biodiversity it contains—this would be a bargain. ■

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Chile's central bank

Generalising about economic or political matters in Latin America is always challenging given that this is a particularly heterogeneous region. Still, "Lessons from the land of high inflation" (February 18th) tried just that when it claimed that governments in the region are questioning the independence of central banks. I would like to point out that the Chilean government fully values the 33-year-long independence of the Central Bank of Chile.

Neither our president, Gabriel Boric, nor any other government authority has criticised monetary-policy decisions since normalisation started some 17 months ago. The current administration has collaborated with the CBC in the fight against inflation by articulating one of the strictest fiscal consolidations in the world, moving from an overall deficit of 8% of GDP in 2021 (under a right-wing government) to a surplus of 1.2% of GDP in 2022.

In my view, supporting independent central banks is not at all alien to progressive politics, given that inflation is a major source of economic inequality.

MARIO MARCEL
Minister of finance
Santiago, Chile

A heating argument

Your article on the challenge in Britain of getting households to take up heat pumps mentioned the scepticism surrounding the widespread use of hydrogen for home heating, in part because it is more energy intensive ("Pump unprimed", February 11th). I was partly responsible for modelling the residential building decarbonisation trajectories for the Climate Change Committee, an independent statutory body. The government has simply picked the lowest target of installing 600,000 pumps a year out of five different scenarios to achieve net zero by 2050. Our modelling showed that without the widespread use of hydrogen boilers the real required heat-pump installation rate is closer to 1m units a year by as early as 2030, to achieve a cumulative total of over 20m heat pumps by 2050.

It is testament to this government's sleight of hand that it has managed to get the media to repeat the 600,000 target, without mentioning the caveat that it only works to achieve net zero if accompanied by a roughly equal installation rate of hydrogen boilers.

ALAA ALDUBUSH
Bristol

It is unlikely that heat pumps will resolve the need to replace tens of millions of domestic gas-fired boilers, unless there is a massive upgrade to insulation standards for the existing housing stock. Heat pumps cannot ensure the level of comfort demanded by the average homeowner without this huge investment. And by the way, where is the army of technicians and plumbers that are going to be required to carry out the conversions?

CHARLES TURNER
Emeritus professor of electrical engineering at King's College London

Opus DEI

Regarding ways to promote academic freedom ("Wanted: severe contests", February 11th) what is happening at Berkeley today is an example of an institution treading into very dangerous waters and savaging its own free-speech legacy. The Free Speech Movement started at Berkeley in the 1960s. The righteousness the university now thinks it has in demanding that applicants submit statements on diversity, equity and inclusion (DEI) is no different from demanding anti-communist oaths during the McCarthy era. The "good guys" always think they're doing the right thing. The problem is that determining who the good guys are is fraught with subjectivity, and the ends they strive towards don't always justify the means they employ. Berkeley had its own anti-communist loyalty oath for faculty members in the 1950s until it was struck down by California's Supreme Court in *Tolman v Underhill*.

Berkeley's DEI statements may not violate the First Amendment of the American constitution, but is that really how low the university's standards for free speech have fallen?

J.P. NIXON
Westport, Connecticut

Proclamations by staff of fealty to DEI could be generated by artificial intelligence, based on well-established buzz words and ideologies. Computer-generated DEI statements would save time and avoid the awkward situation for those who, for example, may support equal opportunities, but not require equal outcomes. The use of AI may allow university political officers to check their boxes. Some self-abasement is necessary, however, to demonstrate power, as noted by George Orwell in "1984".

PETER TURCHI
Santa Fe, New Mexico

All this talk of DEI oaths reminds me of the brief time when I was in charge of getting funding for building roads in Afghanistan. We had to pledge that our project would be gender inclusive and carbon neutral.

ROMAIN POIROT-LELLIG
Lagos

What do we see in Yue

Pity poor Yue Fei, a 12th-century Chinese general, whipsawed between his opposing roles today of avatar of Han ethnic pride on the one hand and symbol of national loyalty on the other ("Seeing red on the silver screen", February 11th). It would be so much easier if the People's Republic were a nation-state made up just of Han Chinese. But it's not. For years now, ideologues have been going back and forth over whether to praise Yue for his steadfast devotion to the struggle to defend Song China against alien Jurchen invaders or to censure him for lacking the foresight to promote the values of ethnic harmony that would one day be so useful to a different Chinese state.

This just shows how risky it is to run your politics through the history books, or historically themed movies and media, for that matter. As David Byrne put it so memorably, "Facts all come with points of view. Facts don't do what I want them to."

MARK ELLIOTT
Department of East Asian Languages and Civilisations
Harvard University
Cambridge, Massachusetts

A solid majority

Your chart of support for Scottish independence amply illustrates why big, irrevocable decisions should not be decided by a simple majority ("A house divided", February 18th). Opinion for support ebbs and flows around 50%. Whether or not a majority for independence is obtained may be an accident of timing or hostage to unrelated events. A requirement for a two-thirds, 60% or even 55% majority makes it more likely that a successful proposal is favoured over a sustained period, greatly increasing its legitimacy.

MICHAEL STREULI
London

Curb your enthusiasm

Bartleby's commentary on the corporate fashion for passion and enthusiasm for the job among employees (February 11th) reminded me of the following quote from "What's Bred in the Bone", a novel by Robertson Davies: "If the system taught them anything at all, it was that all authority is capricious, but may be appeased by a show of zeal, unaccompanied by any real work."

AL JACKSON
West Des Moines, Iowa

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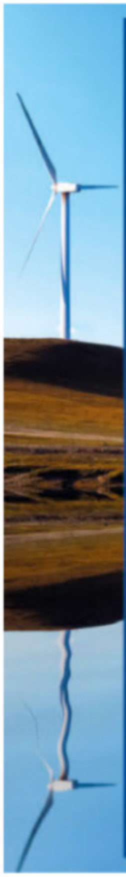

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Big shots

A new class of drugs promises riches for drugmakers, huge savings for health systems and better lives for millions

How did Kim Kardashian, a reality TV star, lose enough weight to fit into a slinky dress once worn by Marilyn Monroe? She has talked about a diet and exercise, but lots of her fans think it could also be thanks to new weight-loss drugs that many far-from-fat celebrities are said to be taking to keep their figures supremely svelte. There is no need to speculate about Elon Musk, a famed entrepreneur: he readily admits that one such drug, Wegovy (semaglutide), has helped him shed weight. In fact, social media are awash with pictures of delighted patients flaunting before-and-after snaps that prove just how effective these novel medicines are.

Investors and analysts are as excited as the gossip columnists. Some estimate that Novo Nordisk, the Danish pharmaceutical firm that makes Wegovy, will sell $3bn-4bn of it in America alone this year. The firm plans to launch the drug in many more countries in the coming months. Its share price is up by 40% over the past year and has doubled over the past two.

Eli Lilly, another pharmaceutical firm, hopes to start selling a similar treatment for obesity, called Mounjaro (tirzepatide), as early as this summer. In trials, recipients shed an astonishing 20% of their weight on average. UBS, a bank, thinks it could become the "biggest drug ever". Jefferies, an investment bank, says that by 2031 the market for these drugs, collectively known as GLP-1 agonists, will exceed $150bn (see chart 1 on next page). That is on a par with all drugs to treat cancer, sales of which amounted to about $185bn in 2021.

Even such head-turning numbers do not fully capture the drugs' potential, however. Obesity is a problem of staggering global proportions—and one that afflicts few celebrities, but legions of ordinary people. In 2023 the World Obesity Federation (WOF), an NGO, says 1.1bn people aged older than five, or roughly 14% of all people in that age bracket, were obese. A further 1.6bn, or 24% of all the world's over-fives, were overweight. In a report to be published on March 3rd, to mark World Obesity Day, the federation projects that 4bn people—half of everyone over five—are likely to be overweight or obese by 2035 (see chart 2, left-hand panel).

The report estimates that the annual cost of humanity's growing paunch will reach $4trn in 2035, of 2.9% of global GDP, in the form both of spending on health care and of working time lost to illness and premature deaths (see chart 2, right-hand panel). That is the equivalent of another covid-19 pandemic every year.

Moreover, obesity is not just a first-world problem. The costs are growing faster in poor and middle-income countries than they are in rich ones. By 2035, the WOF projects that 47% of Mexicans, 46% of Iranians and South Africans and 42% of Malaysians will be obese. Spiralling health-care costs in these countries will be a drag on economic growth. Any treatment that can reduce these numbers could potentially improve the health of billions, and also make the world wealthier.

Tummy trouble

Obesity is typically determined using a ratio of weight to height known as the body-mass index (BMI). A BMI over 25 is normally considered overweight; one over 30 is the standard definition of obesity. Thus an American man of average height (175cm or 5'9") is considered overweight if he tips the scales at 77kg (170lbs) or more and obese if his weight is 92kg (203lbs) or more. (There are exceptions, such as bodybuilders, who weigh a lot thanks to copious muscles.)

Excess weight is not simply a matter of appearance. Obesity is associated with such grave illnesses as diabetes, strokes and heart disease. John Speakman of the

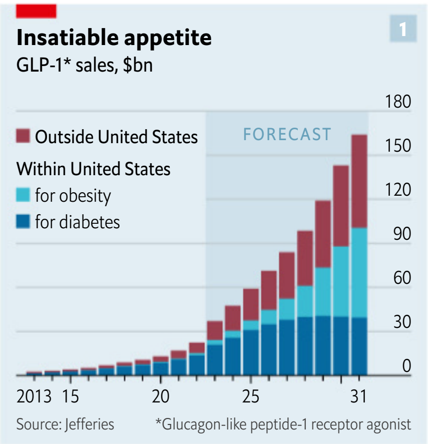
University of Aberdeen notes that women with a BMI of 35 are 90 times more likely to have diabetes than those with a BMI of 23. For men, the risk is five times greater. Obesity also increases the risk of 13 types of cancer, including those of the breast, bowel, womb and oesophagus. More recently, it was found to raise the odds of a patient dying from covid-19. In these and other ways, it causes the deaths of around 4m people a year.

The solution might seem obvious: to eat less and exercise more. To those of a judgmental nature, the failure to lose weight reflects a lack of willpower. But Louise Baur, a professor at the University of Sydney and president of the WOF, rejects the idea that the obesity epidemic represents "the moral failure of hundreds of millions of people". Fatima Stanford, who studies obesity at Massachusetts General Hospital and Harvard Medical School, notes that attempts to lose weight through diet and exercise work for only 10-20% of the population: "For most people we don't see a dramatic drop."

Fat-linger error

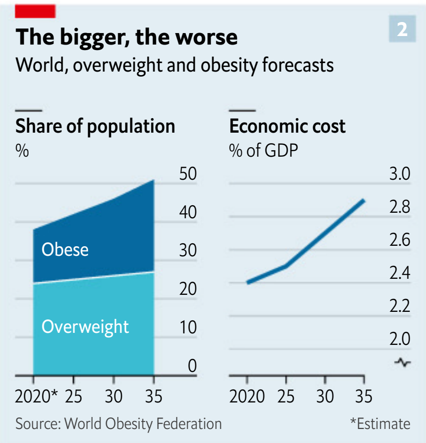
The reason almost certainly lies in the evolutionary past. In a state of nature food is rarely plentiful, so *Homo sapiens* has evolved to hang on to fat. One adaptation is that, when a body's caloric intake is reduced, its resting metabolism slows. Another is that it releases extra ghrelin, a hormone which signals to the brain to increase food intake.

Worse, from the point of view of the would-be dieter, a body that has lost weight appears to "remember" its previous level and fights to regain it. "Your entire biology reacts in a way to make you want to go back and eat," laments Ahmed Ahmed, a British bariatric surgeon. A study of contestants in "The Biggest Loser", a television show in which participants competed to lose the most weight, found that even six years after their appearance, their metabolisms were still slower than they had been before they started dieting. The amount they could eat without prompting an increase in weight had, in effect, diminished. Diets, in other words, get progressively harder to sustain.


Insatiable appetite

GLP-1* sales, $bn

Source: Jefferies *Glucagon-like peptide-1 receptor agonist


The bigger, the worse

World, overweight and obesity forecasts

Source: World Obesity Federation *Estimate

What is more, obesity has a sizeable genetic component, and so is partly inherited. Dr Speakman says between 45% and 65% of an individual's risk of becoming obese is passed down in this way. A predisposition, though, needs encouragement to manifest itself. It is not just people's genes, but also the "obesogenic" circumstances in which so many of them live that is adding to the species' girth. As Dr Baur puts it, obesity is "a physiological response to what has become a pathological environment".

The most notable feature of that environment is an abundance not simply of food but, more specifically, of processed food. Merely grinding and reconstituting the food given to lab rats causes them to put on weight. In 2019 a similar experiment on people by Kevin Hall of America's National Institutes of Health and colleagues showed that, under controlled conditions, people consume more calories if offered mainly processed rather than unprocessed food.

And gaining fat is easy in a mechanised world. Work used to consist of arduous manual labour for the vast majority of humanity—but not any more. For most people in the rich world, and a fast-growing proportion in developing countries, physical exercise is no longer a necessity, but an entirely voluntary pastime, to be pursued in leisure moments, if at all. A study published in 2011 looked at how active people's work had been in America over the previous five decades. Between 1960 and 2006 there was a reduction in energy expended of 100 calories a day, on average—an amount that turned out to account for much of the increase in Americans' weight over that period.

Processed food and sedentary lifestyles are the principal elements of today's obesogenic environment, but other things are involved as well. Depression and other mental-health conditions—and some of the drugs used to treat them—encourage weight gain. Dr Stanford says that 20% of America's obesity problems are tied to medications such as lithium, antidepressants and anti-insomnia drugs. For women, the menopause is also reckoned obesogenic.

The steady growth of human waistlines has defied the efforts of doctors, dieticians, pharmacologists and policymakers for decades. Ever more elaborate rules about how food is labelled or marketed have not made a dent in the problem. Taxes on unhealthy ingredients are unpopular, in part because they place a far higher burden on the poor than on the rich. A good indication of how desperate so many people are to lose weight is the nearly $250bn the world spent on dieting last year, even though it tends not to work.

Drug companies have offered a series of ineffective and sometimes dangerous treatments. There was dinitrophenol, used in diet pills during the 1930s, which caused perhaps 25,000 people to lose their sight. Later on amphetamines became popular (and effective) slimming aids—until the risk of addiction and other side-effects became apparent. Ephedra, a herbal medicine containing a substance like amphetamines, was banned in America in 2004 after it was tied to heart attacks and strokes. A few years later two other treatments, rimonabant and sibutramine, were withdrawn from sale, amid concerns about their safety.

Staple diet

In extremis, the seriously fat can turn to bariatric surgery, in which their stomachs and small intestines are rearranged to reduce the amount of food absorbed, and to accelerate the feeling of being sated. This, says Dr Ahmed, can reduce body weight by 30% to 50% in the first six months, and potentially more after that. It also brings improvements in blood pressure, breathing, sleep, cholesterol and back pain. And many patients will no longer be diabetic after surgery.

Surgery, though, is a drastic response to the problem, and is limited by the number of surgeons. Hence the excitement about GLP-1 agonists, which can be administered by patients themselves as weekly injections. The new drugs were first devised as treatment for diabetics. They mimic hormones the body produces naturally after a meal, which stimulates the release of more of a second hormone, insulin, and less of a third, glucagon. Together, these effects regulate the level of glucose in the blood.

In addition, however, GLP-1 agonists slow down the rate of "gastric emptying", which means food stays in the stomach for longer, so people feel fuller and want to eat less. The drug also affects the hypothalamus, the part of the brain that controls hunger. What is more, GLP-1 has an effect ▸▸

on fat, too, making the body more likely to break it down.

Novo Nordisk began selling semaglutide, the first GLP-1 agonist, in 2017 under the brand name Ozempic, to treat diabetes. But having noticed how many of the recipients slimmed down dramatically, it soon began testing the drug as a weight-loss treatment. In a 40-week trial a third of patients lost more than 10% of their body weight after taking a weekly dose of 1mg. A second trial, of a 2.4mg weekly dose for 68 weeks, brought an average weight loss of 15%. That is the dose Wegovy provides; it has been on sale in America since 2021. In December America's Food and Drug Administration approved its use for 12- to 18-year-olds as well.

Mounjaro, meanwhile, activates the same GLP-1 receptors as Wegovy, but also mimics a second hormone involved in the regulation of appetite. In trials it stimulated an astonishing 20% reduction in body weight on average. Many other drug companies, sensing a possible bonanza, are working on similar products.

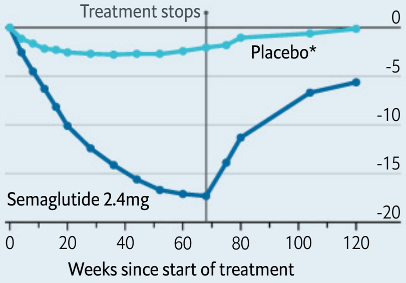
Not to everyone's taste

The new treatments are not without their flaws. For one thing, there are side-effects, including vomiting and diarrhoea, which were severe enough to cause 3% of patients to stop using them in a survey conducted by the Mayo Clinic, an American hospital. In addition, they are supposed to be taken as part of a broader programme of dieting and exercise—although it is not clear how essential this is to the weight loss. Semaglutide, specifically, appears to increase the risk of a rare type of pancreatitis. There are also concerns over the use of the drugs during or just before pregnancy. And studies in animals have shown a higher incidence of thyroid cancer.

Don't stop 3

Semaglutide weight-loss drug trial

Change in body weight, %



*Includes diet and exercise

Source: "Weight regain and cardiometabolic effects after withdrawal of semaglutide", by J. P. H. Wilding et al., *Diabetes, Obesity and Metabolism*, April 2022

For many these risks will be worth running. A bigger drawback, however, is that those who start taking the new drugs are likely to depend on them for life. Stop, and the weight piles back on, just as with most conventional diets. In the first year after stopping a 2.4mg dose of semaglutide, people regain two-thirds of the weight they lost (see chart 3). And, as with dieting, some people even put on more weight than they started with.

The need to keep injecting is fine with drug companies, but it makes doctors more cautious, given the lack of data on the effects of lifelong use. Britain's draft national guidelines say semaglutide should not be taken for more than two years for weight loss. But as more data on the drugs' long-term effects become available, it is possible that they will become like statins, a medicine to lower cholesterol that is commonly prescribed for life.

Lifelong commitments can be expensive, however. Taking Wegovy costs around $1,300 a month in America and Ozempic about $900. The market will clearly bear this: so great is the demand for the drugs for weight loss, many diabetics complain, that they cannot get hold of them for their original purpose. Novo Nordisk has set up a page on its website to reassure potential customers who are struggling to find any Wegovy. "We are taking significant measures to increase our production capacity," it declares. The firm has hired a second contract manufacturer to make the drug; the first is expanding its output (see Schumpeter).

Insurers and governments will presumably be able to negotiate discounts to drugmakers' list prices. And as rival products come to market, prices should come down eventually. In the very long run the new drugs will lose their patents, and become available in generic form.

But at the moment, in America, relatively few insurance policies cover Wegovy—mainly those backed by employers. (This still leaves Wegovy a potential American market of 40m patients, notes Lars Jorgensen, Novo Nordisk's chief executive.) Governments are even more hesitant. Although the drug has been licensed in Denmark and Norway, it is not provided through the state health system in either country. Britain's National Health Service has been reviewing the drug; it seems likely to make it available soon, but only to the most obese patients and only through specialised clinics.

This caution will presumably evaporate if it becomes clear that widespread use of the drugs will bring big cost savings to insurers or governments in the form of avoided treatments for conditions related to obesity. Daniel Chancellor of Citeline, a market-research firm, says GLP-1 agonists have reduced strokes and heart attacks in those taking them for diabetes by 14%, deaths from all causes by 12% and hospital admissions for heart problems by 11%. Novo Nordisk is sponsoring a formal trial looking at semaglutide's impact on cardiovascular disease among overweight and obese patients. It started in 2018 and is due to conclude later this year.

A frantic spate of haggling will doubtless follow. Insurers and health systems will need to weigh the massive cost of treating diseases linked to obesity, and the improved quality of life the new drugs will bring, against the prices drugmakers are demanding, multiplied across the lifetimes of likely recipients. But the scope for savings is enormous.

Reducing the global numbers of the overweight and obese by five percentage points below the current trend would bring annual savings of $429bn, according to a study published in BMJ *Global Health*, a medical journal (that figure includes the benefits of the obese living longer, more productive working lives). The potential benefits would extend to middle-income countries, too. The study expects the costs of obesity to rise by 3.6% a year between now and 2060 in Australia, but by 6.6% in Thailand and 7.6% in India.

The fact that a growing share of humanity has more than enough to eat and no need to exhaust itself through constant, gruelling physical labour should be cause for celebration. Indeed, to most people, it would seem an obvious sign of progress. Yet those same heartening trends are also entombing billions of people in a shroud of fat. The misery associated with this global epidemic of obesity is vast. It kills millions, makes many more sick, costs huge sums—and is an unfathomable well of stigma and shame for those afflicted. If the new drugs being deployed against obesity can reduce this unhappy tally by even a small amount, they should be welcomed with open arms. ■

Britain

Capital markets

Gilt complex

Britain's stockmarket has languished. Its gilt market may be next

Look at Britain's FTSE 100 share index and you might think that the City of London is once again on top of the world. Investors around the globe had a terrible time in 2022, but those who stashed their money in London's bourse were spared. America's tech-heavy NASDAQ index fell by a third, making it one of the worst years on record. Meanwhile, the FTSE 100 hit a new record high last month. While rising interest rates and higher commodity prices hammered many stocks, they flattered the banks, miners and energy giants of London's once-unfashionable stock exchange.

Even Britain's sovereign-debt, or "gilt", market has settled down. Just months ago a disastrous budget by Kwasi Kwarteng, then chancellor of the exchequer, threatened it with catastrophe. But under Jeremy Hunt, Mr Kwarteng's more competent and responsible successor, a repeat seems out of the question. As Mr Hunt prepares to unveil a new budget on March 15th, government borrowing is set to be £30bn ($36bn, or 1.3% of GDP) lower this fiscal year than forecast in November.

Yet the benign headlines mask a long-running exodus from Britain's capital markets. The 21st century has seen London's stockmarket shrivel compared with those in the rest of the world, from accounting for 13% of global equity value to just 4%. Initial-public offerings (IPOs), though thin on the ground everywhere during last year's market crash, were nearly unheard of in the City. Less than 1% of the capital raised through global IPOs was raised in London, down from 18% in 2006.

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Meanwhile, barely a month has gone by without another FTSE 100 or FTSE 250 firm deciding to leave London's bourse. Recent examples include Aveva, Avast, HomeServe, Micro Focus and Ultra Electronics. All told, some £80bn-worth of shares were de-listed from Britain's public market last year in favour of private ownership or corporate takeovers (see chart 1).

Big firms are ditching their British listings. Flutter, the world's largest listed betting company, wants its shareholders to approve a secondary listing in New York, in part to give it the choice of later moving its primary listing there. Arm, one of Britain's most successful tech companies, was taken private in 2016 but is poised to re-enter the public markets. Its owner's chief executive describes the NASDAQ, rather than the London Stock Exchange, as the "most suitable" venue. Even Shell, an energy giant and the largest firm listed in Britain, is reported to have mused about moving its listing to America.

The causes of this decline are now largely self-reinforcing. Because Britain fails to attract exciting IPOs, its stockmarket is associated with laggards and investors assign it a low valuation. That nudges promising firms towards other, more illustrious exchanges where they can raise more money. The good businesses that remain in London, meanwhile, look like cheap and enticing takeover targets for foreign buyers. So Britain's bourse loses more good

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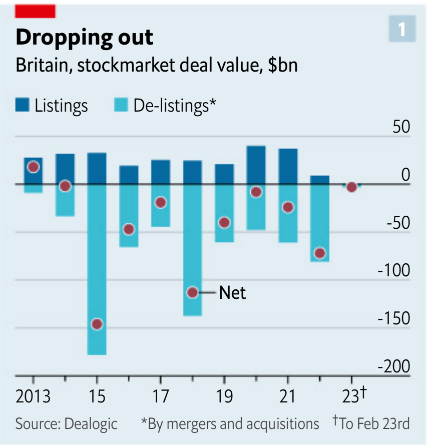


Dropping out

Britain, stockmarket deal value, $bn

Source: Dealogic *By mergers and acquisitions †To Feb 23rd

companies, and the cycle starts again.

This vicious circle was kicked into motion by the gradual disappearance of a key buyer of domestic stocks. Defined-benefit (DB) pension schemes, today worth £1.5trn, have gone from having around a quarter of their assets invested in London-listed shares in 2008 to less than 2% in 2022.A combination of regulatory incentives and the DB schemes' increasing maturity drove them away from the risk and growth potential of stocks and towards the safety of bonds. As a result, Britain's stockmarket lost part of its natural capital base, setting it on its downward path.

Raj Mody of PwC, a consultancy, argues that a worryingly similar dynamic may now be at play in Britain's sovereign-debt market. Pension and insurance funds own 27% of gilts by market value (see chart 2). DB schemes are particularly strongly incentivised to hold them, as regulations allow them to match the cash flows generated by gilts to their future liabilities. That eliminates the risk that future market movements will push them into deficit.

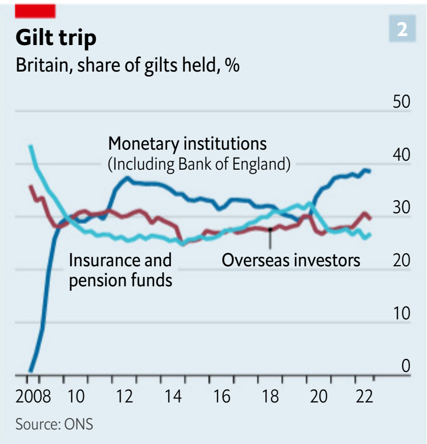
After decades of underfunding, PwC estimates that DB schemes now, in aggregate, have sufficient assets to pay insurers to take on their liabilities. For the employers responsible for the schemes, this is attractive: it allows them to offload all their remaining risk, and between £40bn and £50bn of such "buyouts" now take place annually. Yet insurance funds, subject to different regulations to DB schemes, are less inclined to load up on gilts, preferring higher-yielding assets like corporate bonds, leases and infrastructure. The investment in riskier assets is a boon. But it also sets the stage for the long, slow exit of one of the gilt market's biggest buyers.

To make matters worse, an even bigger buyer of gilts is departing at the same time. Through successive waves of quantitative easing, or large-scale purchases of government bonds with newly created money, the Bank of England has amassed an enormous portfolio of gilts. Now it, too, is in exit mode. The bank began selling its holdings in November, aiming to reduce them by £80bn per year. The result is a vast increase in the amount of gilt issuance the rest of the market will be asked to absorb. Citigroup, a bank, estimates that in the coming fiscal year Britain's government will need to borrow twice as much net cash from private investors (as opposed to its central bank) as it has in the past eight years combined.

With such important buyers of Britain's sovereign debt departing, who is left to sell to? Foreign investors make up most of the rest of the market. But following the country's near meltdown last autumn, they are increasingly wary. And in any case, British assets no longer seem like a must-have for a global investor's portfolio. Buying long-dated gilts, says one American hedge-fund manager, means buying a long-term stream of sterling income "and what the hell am I going to do with the sterling?"

Britain's government-debt market, then, may see demand steadily leak away over the next few decades in the same way the stockmarket has over the past few. Both declines have consequences, but those of the second may be felt more keenly. A stagnant stockmarket is a totemic blow to the City of London's status as a global financial centre. And if overseas listings pull innovative firms elsewhere, they are less likely to contribute to Britain's future prosperity. A lack of demand for sovereign debt makes borrowing more expensive for taxpayers at a time when public services are already creaking and demands on government spending only likely to grow. Meanwhile, as the Treasury finds it harder to issue long-dated debt its exposure to short-term interest-rate changes will rise.

As backbench Tory MPs press Mr Hunt to revive their tax-cutting agenda in his coming budget, they might pay more heed to Britain's increasingly fragile capital markets. His predecessor's mistakes provided a stark reminder that investors' appetite for sterling assets has hard limits under a fiscally irresponsible government. Britons could do without another one. ■



Gilt trip

Britain, share of gilts held, %

Source: ONS

Brexit and Northern Ireland

Untying the knot

Rishi Sunak's deal softens the Irish Sea border, but not as much as he claims

THE NEW Brexit deal for Northern Ireland is a big win. Rishi Sunak glowed as he joined the European Commission president, Ursula von der Leyen, on February 27th to unveil the "Windsor framework". Mr Sunak touted the EU's concessions and the new mutual trust. Yet the devil is in the details.

The Democratic Unionist Party (DUP) wanted the removal of the **Northern Ireland protocol**, which keeps the province in the EU's single market for goods. The Windsor framework replaces it. But the treaty text of the protocol has not been changed significantly.

A new system of **"green lanes"** will allow trusted traders to export goods from Great Britain to Northern Ireland that are not crossing into Ireland with minimal (but not zero) checks. Goods that may cross the border face full "red lane" controls. Labels must be used to make clear which is which.

The framework also deals with a set of specific grumbles over **parcels, pets, sausages** and so on. Bans on these will be scrapped, as they will be for plants and seed potatoes. Any medicines approved by the UK will also be freely available in Northern Ireland.

As for **VAT, excise duties and state aid**, Northern Ireland will now benefit from UK-wide changes to VAT for fixtures and buildings, and from excise-duty relief for alcoholic drinks this summer. But elsewhere EU rules will apply. So will the EU's state-aid regime, although it has been clarified as applying only in narrowly defined cases.

On governance, the DUP wanted to end jurisdiction for the **European Court of Justice**. The deal says most disputes should be settled by Northern Irish courts. But the ECJ is still the ultimate arbiter of EU laws. The agreement also creates a **"Stormont brake"**, under which 30 members of the Northern Ireland assembly, from at least two parties, can ask the UK to veto changes in EU single-market rules. Yet as Norway has found with a similar brake, this is a nuclear option that would trigger EU retaliation—casting doubt on whether it can be used.

The Windsor framework clearly improves the protocol. Yet it is misleading to claim, as Mr Sunak has, that "it removes any sense of an Irish sea border". No wonder the DUP wants more time to analyse it.

Salad rationing

Struggling to ketchup

SOUTHPORT

Britain’s tomatoes are a victim of the energy crisis

“It’s not wellies and wheelbarrows,” laughs Andy Roe, head of tomato production at Flavourfresh Salads, a grower outside Southport, in England’s north-west. The company is one of the few in Britain still supplying the fruit through the winter thanks to a state-of-the-art hydroponic greenhouse complex fitted with Barbie-pink light emitting diodes (LEDs) to replace the sun. The vines, tens of metres long, suspended above hot water pipes and fed with a steady diet of carbon dioxide, are a world away from their spindly cousins in compost bags that are a feature of Britain’s conservatories.

Not only does Flavourfresh supply greengrocers but, thanks to an on-site miniature power plant known as a combined heat and power (CHP) unit, it also provides electricity to four surrounding villages. That means the tomatoes are embedded as much in global energy markets as the Lancashire soil: the CHP uses natural gas bought from wholesale markets and sells electricity to the national grid. Carbon dioxide from the CHP is scrubbed of pollutants and pumped into the greenhouse to be photosynthesised into sugars—the tomatoes gobble up tonnes of the greenhouse gas. Water used to cool the device is pumped around the nursery and reproduces a climate a bit closer to the plant’s native Mexico than is typical for February in England. The pink LEDs, powered by the electricity, produce the precise spectrum of the sun’s light that the tomatoes love.

To understand why Britain has run out of salad, think of a tomato less as a fruit and more as a form of energy storage. The original energy can come from the ambient solar power hitting the earth, trapped by the panes of a greenhouse, or it can be generated by burning fossil fuels. The solar-powered tomato is the most efficient; according to estimates by Vaclav Smil, a Canadian scientist, one typical 125-gram example grown out in a sunny field requires 22 kilocalories of additional energy, about the same energy as one would gain from eating it. A tomato produced in a heated greenhouse in northern Europe might require as much as 150 times as much energy to produce as it offers as food. A kilogram of such tomatoesrequires the equivalent of a litre of diesel in energy.

Britain’s salads are collateral damage from the Russian invasion of Ukraine. Growers rely on copious heating to keep their greenhouses toasty and, in winter, well-lit enough for the subtropical plant. Many of Britain’s outfits have shut up shop as natural gas prices started to rise. By January tomato prices had increased by 35% compared to two years before. In February, the crisis became acute and supermarkets rationed their sales.

Shortages are not a uniquely British problem. Many growers in the Netherlands have called it a day. As well as higher electricity bills, the war has raised the cost of fertiliser. At the same time an unseasonably warm autumn in Spain reduced planting.Production in Morocco and north Africa, meanwhile, has been whacked by a virus known as tomato brown rugose virus and a patch of bad weather.

What is unique, however, is that Britain’s supermarkets have begun to ration salad. On February 27th Lidl, a low-cost supermarket, announced it was limiting sales to three tomatoes, cucumbers or peppers per person. Expats and continental Europeans, keen to blame Brexit, have shared taunting photos on social media of well-stocked supermarket shelves and labelled the problem Vegxit.

Cross-border trade difficulties have certainly not helped but rationing should be blamed more on the hypercompetitiveness of Britain’s supermarkets; smaller shops are often well-stocked. For the larger outfits, fresh vegetables are a way to get customers through the door and supermarkets would rather sell the products cheaply than subject their customers to eye-watering prices.

The natural gas to power Flavourfresh’s CHP was bought on forward contracts and the electricity sold months ago; guaranteeing the investors who own the CHP a return. The cherry tomatoes currently being picked were sold on a contract to a big British supermarket. That provided the grower with the certainty to keep producing through the winter. “Farming is always a gamble,” observes Mr Roe, on the weather, on the health of the crops and, this year especially, on global energy markets. Scientific know-how, however, has helped stack the deck in the grower’s favour. ■

The SNP

A state of drift

Nicola Sturgeon leaves behind a modest record of reform

The contest to succeed Nicola Sturgeon as leader of the Scottish National Party (SNP) has revealed an old tension between fundamentalists, who stress the pursuit of independence from Britain and nothing less, and gradualists, who think support for the cause is best built by accumulating powers and governing well. Ash Regan, the fundies’ candidate, favours using the next election as a de facto ballot on independence. Her rivals—Humza Yousaf, the health secretary, and Kate Forbes, the finance secretary—are more cautious. Mr Yousaf admits there is no “sustained majority” for divorce.

That partly reflects the SNP’s underwhelming record in office since 2007, through a series of minority, majority and coalition administrations. It has enjoyed strong tailwinds: iron party discipline, more generous budgets than England, a wide roster of powers and a network of experts in health and education. Scotland might have become a Petri dish for public-policy reform. But the paradox of nationalism is that a movement which dreams of building a wholly new and different state has, after 16 years in power, a modest record of improving the existing one.

There have been many eye-catching initiatives.University tuition, school meals for under-tens, sanitary products and prescriptions are universally free. Ms Sturgeon has also tinkered with income tax: rather than the three bands found in the rest of Britain (20%, 40%, 45%), Scotland now has five (19%, 20%, 21%, 41% and 46%). Nationalists call it a foretaste of the Nordic-style social democracy that would follow independence.

Public services may be generous but they are not in good shape. Comparisons between health-care waiting lists in Scotland and the rest of Britain are complicated by different reporting methods. But the backlog of patients awaiting treatment continues to grow, according to a report by Audit Scotland, a state watchdog, published on February 23rd. Embarrassingly for Mr Yousaf, a target to greatly increase the number of health-care procedures within three years is unlikely to be met.

Scotland's problem with fatal drugs overdoses has severely worsened: deaths doubled in the decade to 2021. Scotland's schools are a sorry story, too, lagging behind the rest of Britain in maths, according to a study in 2021 by the Education Policy Institute, a think tank.

The SNP has indulged in piecemeal giveaways but avoided deep-rooted change. Local government, and its antiquated tax regime, has been left untouched. The SNP's desire to preserve a coalition for independence has discouraged it from embarking on difficult reforms, says James Mitchell of the University of Edinburgh. Vast numbers of working groups, commissions and forums debate reforms but rarely execute them. Eggs have been kept happy; the omelette is unmade.

A read through Audit Scotland's back catalogue captures this sense of drift. There are recurrent problems with fuzzily designed schemes that lack clear objectives, modelling and budgets, resulting in what it calls "a major implementation gap between policy ambitions and delivery on the ground." A scheme to improve workplace skills meandered for years because expert bodies couldn't agree on the way forward. A plan for Scotland to assume responsibility for benefits from Westminster will take many more years than expected. Indeed, it is often difficult to say how well things are going in Scotland. In signing off the Scottish government's accounts in 2021, the watchdog concluded that in the "absence of defined, measurable targets, it is difficult for the reader to assess whether the national outcomes are being achieved".

BROKE
NOT
BROKEN

Homeward, to think again

Stasis is not a viable long-term option. Scotland is ageing more rapidly than England, adding to strains on the health- and social-care systems. In the event of independence, Scotland would need to pull off the doubly heroic feat of building a new state fit for an ageing population. The SNP's record of government does not inspire much confidence. ■

Britain and France

Détente cordiale

PARIS

France and Britain will meet to put their differences behind them

SIX MONTHS ago, during her campaign to lead the Tory party, Liz Truss claimed not to know whether Emmanuel Macron was a "friend or foe". Her successor as prime minister, Rishi Sunak, has no such qualms. On March 10th he will lead an eager pack of ministers up the steps into the Elysée Palace in Paris for a summit with the French president and government. With a freshly negotiated EU deal on Northern Ireland in his pocket, Mr Sunak will be hoping that this unlocks more from the French. That may be harder than he thinks.

The first Franco-British summit was held in 1976 in Rambouillet under Valéry Giscard d'Estaing and James Callaghan. Since then, these confabs have become almost yearly events. In the 1980s and 1990s François Mitterrand held 12; Jacques Chirac, his successor as president, 11. But Brexit, and its damaging fall-out, has meant that not a single bilateral summit between the two countries has taken place since 2018, when Mr Macron's government sat down with Theresa May's at Sandhurst.

A defining feature of the Paris event is that it is taking place at all. Brexit has emptied diaries of the regular meetings that used to bring ministers together. During the Boris Johnson years, cross-channel trust simply collapsed. After a period marked by the trading of insults and threats, the get-together is a positive sign that the two governments are ready to sit down and talk seriously. France had originally suggested holding the summit in the northern town of Arras, says an official involved, but switched to Paris to please Downing Street. With a war on the continent, it looks like a reasonably good idea for Europe's two nuclear powers and permanent members of the United Nations Security Council to try to get on.

The summit could help forge closer co-operation on some bilateral matters, such as nuclear energy, university research or student mobility. There may be an effort to curb the dangerous crossings in "small boats", as Britain wants—although France rejects outright the British idea of systematically returning to French soil migrants who make it across the channel. Last November Britain agreed to pay more to help the French patrol their channel coast, and France agreed to let British police monitor such operations.

The meeting may also set the stage for future talks on other crucial areas of co-operation, notably defence and security. Mr Macron has long argued that France and the EU should work more closely with post-Brexit Britain in these areas. In that spirit, the heads of all five of the two countries' intelligence services were invited to join the Sandhurst summit five years ago. Indeed, the option of tightening links between the EU and Britain in these fields was written into the political declaration on Brexit. Mr Johnson chose to ignore it.

On the ground, the two countries' armies continue to work well together, notably as part of a NATO battlegroup in Estonia. The Combined Joint Expeditionary Force (CJEF), set up by Britain and France in 2010, can now deploy 10,000 troops in a crisis. The French are keen to start a serious discussion on defence and industrial co-operation, not just to utter warm words and celebrate renewed friendship.

Yet more ambitious plans could be difficult. Britain still looks instinctively to NATO and America when it comes to security. The sort of mutual confidence that led to the CJEF's inception at the Franco-British summit at Lancaster House in 2010 is lacking. Then, the two countries were ready to make unusually bold joint commitments, including the building of a shared facility in France for testing nuclear-warhead designs. The Northern Ireland deal "has come too late to affect much more than the atmospherics", says Alexandre Holroyd, a deputy for Mr Macron's party whose constituency includes French voters resident in Britain.

It has not escaped French attention that just days after the summit Britain, America and Australia are due to head to Washington, DC, to finalise details of AUKUS. This trilateral defence pact signed in 2021 sank a French contract to supply Australia with submarines, upset France's Indo-Pacific security strategy and enraged the French government. "AUKUS still casts a shadow on the relationship that London doesn't seem to fully grasp," says Georgina Wright, of the Institut Montaigne, a think-tank in Paris. In short, there will be a warm glow at the summit in the City of Lights. But full trust has yet to be restored. ■

God's pronouns

Our Mother which art in heaven

A rumpus is brewing over God's pronouns. Rightly

GOD WAS very clear on many things. He said: "I am the LORD." He said: "I am…the Almighty." He said: "I am Alpha and Omega." However perhaps because He tended to communicate by angels, divine inspiration and stone tablets, rather than by email with sign-off, He did not specify His pronouns. Now an argument is brewing among some in the Church of England (C of E) over whether He is indeed best referred to as He/Him or whether He might also be referred to as She/Her; or neither; or all of the above. Omnipotence allows the non-binary to be so much more expansive.

Not to mention confusing. All debates over pronouns risk becoming befuddling; debates over which pronouns to use for a bodiless, sexless, omnipresent deity who exists beyond time can become more befuddling still. Naturally this does not prevent theologians from having them. While C of E traditionalists wish to keep Him as Him, some want additional liturgy to be developed to allow them to speak of God in a non-gendered way. The debate is unlikely to be resolved soon: the C of E officially began discussing this in 2014; will begin a joint project on gendered language this spring; and estimates it will be years before it is resolved. *Sub specie aeternitatis*, that is brisk: Anglicans began discussing transubstantiation 500 years ago and the issue is still not settled.

Sex and God are currently causing conniptions in other ways in Britain. When Kate Forbes, a Scottish politician and Christian, said that she would have voted against gay marriage, it resulted in the near-scuppering of her bid to be the leader of the Scottish National Party. In February, when the C of E said it would start allowing the blessing of gay marriages in churches, that resulted in a split in the Anglican Communion (a club of churches) and—a sure sign of Anglican outrage—merciless declarations from bishops worldwide that they were praying for each other.

Both debates tend to make traditionalists chunter about woke nonsense. (Vladimir Putin is among those who disapprove.) In truth what is most striking about the debate over God's sex is its antiquity. Christians have been discussing God's sex for centuries in ways that make LGBTQI+ categories seem conservative. There are ancient texts in which the Holy Spirit is referred to as "she" and "mother" and others in which God has breasts which are milked by the Holy Spirit. Sexing a Trinity is tricky.

Both sides of these debates tend to turn to the Bible as an authority. Not without reason: the Bible is the inspired word of God. The problem is that God inspired quite a lot of words—modern editions run to 1,000-odd pages in a tiny font—and many of them disagree either with each other or with current Christian doctrine.

Anglicans today might argue that God is neither male nor female. But the Bible offers ample evidence to the contrary. In its pages, God is a "male and masculine" deity, says Francesca Stavrakopoulou, professor of Hebrew Bible at Exeter University. The Bible contains verses detailing everything from God's muscles (big); to his genitals (also large). But those verses tend to find their way into fewer C of E press releases.

In truth, Christians have long operated a pious pick'n'mix approach to their quarrels. "The issue du jour is homosexuality," says Diarmaid MacCulloch, emeritus professor of the history of the church at Oxford University. But this issue is "a new one, which seems to threaten the masculinity of a great many Anglican bishops worldwide." Such debates invoke antiquity but are often more revealing of modernity. A concept called politicomorphism argues that instead of things being done on earth as in heaven, often the reverse is true. Many of the bishops who split from the Anglican Communion come from conservative countries such as Sudan, in which homosexuality is illegal.

But all Christians have their limits. Anglicans are in mild-mannered disarray over which pronoun to use for God, yet arguably there is a word that solves their debate perfectly. The pronoun "they" is not only gender neutral but can also, much like a trinitarian God, simultaneously be both singular and plural. However its use in the singular is frowned on by the fuddy-duddy sort of grammarian and, as one Christian theologian observes, "Christian theology has probably not caught up with [its] modern use." Evidently there are some innovations that even Anglicans can't abide. ■

God: He/She/It

Bagehot | Everything's coming up Rishi!

How the Conservative Party channels Milhouse from The Simpsons

WATCHING RISHI SUNAK enjoy his best day as prime minister, it was impossible not to be reminded of the biggest loser in the western canon. As the Conservative leader talked MPs through his renegotiation of the Northern Ireland Protocol, the spectre of Milhouse from "The Simpsons" loomed.

The blue-haired, bespectacled Milhouse is Bart's best friend and a glutton for misfortune. Sometimes, however, things go his way. When a flood hits Springfield, water gushes into Milhouse's bedroom and over his short-legged trousers. "My feet are soaked but my cuffs are bone dry!" he cries with delight, as he triumphantly squelches out of his ruined home. "Everything's coming up Milhouse!"

A Milhousian short-term delight even when things look terrible long-term is the order of the day for the Conservatives. True, 25 points behind in the polls they may be. Yes, electoral Armageddon awaits, unless something changes. But things are, otherwise, going well for the Conservatives. A new deal in Northern Ireland is just the beginning. From the public finances to relations with France, everything's coming up Rishi!

Threats to Mr Sunak have been seen off, for now. The Conservatives' wing of hardcore Brexiters, which has bent the party to its will for a decade, is now meek. Previously, they may have thrown a fit over the new arrangements in Northern Ireland, which make it easier to trade between the province and the rest of the country, but still leave it covered by EU law. Instead, they piped down, surprised that Mr Sunak had managed to secure what he did (see section). He has even scared off Boris Johnson, who still dreams of one day returning to Downing Street.

Elsewhere, the Treasury is forecast to borrow £30bn less than it expected this year, giving the government some legroom in the March budget. Energy prices have collapsed, making government subsidies cheaper. Inflation is falling. One estimate from Citi, a bank, said inflation in Britain could fall to 2% by the end of the year. Pay deals with public sector unions are easier to reach when there is more cash to go around and inflation is, at least, slowing.

An Anglo-French summit next week is an easy opportunity for Mr Sunak to boost his statesman's credentials. The bar is on the floor. Gone are the idiotic rows that marred relations under Mr Johnson. (After a particularly noxious one, Mr Johnson took to whistling "La Marseillaise" between meetings, recalls one former aide.) A mooted deal would aim to stem the tens of thousands of people who cross the channel in small boats each year. Unlike arrangements in Northern Ireland, which are important in the province but largely ignored outside it, voters would care, too.

Milhousian thought may hit the country at large. For the first time since 2016, the interests of the Conservative Party are the same as the country's. Mr Johnson's Brexit deal was awful for Britain but fantastic for the Conservative Party, as it helped secure an 80-seat majority in the 2019 general election. Now, however, the modest goals Mr Sunak has set himself —cutting inflation or normalising relations with the EU—will leave both party and country better off. Everything's coming up Britain!

So ends the case for short-term optimism. The case for long-term despair is more compelling. Reduced to its essence, the achievement of the Northern Ireland deal seems ridiculous. No longer would the trade of seed potatoes between Scotland and Northern Ireland—parts of the same country—be impeded, declared the prime minister. Sausages can cross the Irish Sea with ease. People are prone to strange boasts after a divorce. Milhouse's father, another loser, bought a children's bed in the shape of a sports car shortly after his wife left him. "I sleep in a racing car. Do you?" Homer Simpson replied: "I sleep in a big bed with my wife."

Fundamentally, Mr Sunak is earning praise for cleaning up the mess he helped make. Other senior Conservatives went along with Brexit because it was the people's will; Mr Sunak simply thought it was an excellent idea. The deal that Mr Sunak dismantled was one that he once supported. Relations with France must be repaired only because they have been trashed by Mr Johnson, whom Mr Sunak backed early and loudly in 2019.

Whether Mr Sunak's government can do more than fix its own mistakes will determine the course of politics for the next 18 months. Public services are exhausted. Day-long waits in A&E are common. Some crimes have, in effect, been legalised, with the charge rate for even serious crimes such as assault now in single figures. Higher interest rates mean about 1.4m households will roll on to costlier mortgages this year. Inflation may be falling. But voters will still be worse off. A recession may be avoided; widespread misery will not.

Not only am I not learning, I'm forgetting stuff I used to know

Westminster is bad at ingesting such slow-moving trends. Politicians and the people who write about them are easily bored. The thought of repeating the same tale—that slow growth, rubbish public services and falling incomes will probably doom the Conservatives at the next election—gives people hives. Better to paint Mr Sunak as a plucky underdog. It was a similar desire that saved Milhouse. In an oral history of how everything came to be coming up Milhouse, a writer on "The Simpsons" revealed he took pity on the hapless boy: "There are so many pitches just dumping on him and his family—I felt like I had to rescue him from the other writers." Mr Sunak will benefit from the same protection.

If Mr Sunak is able to guide the Conservatives to victory at the next election, potentially as soon as next summer, he will deserve a reputation as the shrewdest politician this century. Even if he somehow drags the government from potential extinction to a mere hung parliament, plaudits will be merited. Should he fail to manage either, he will be remembered as Milhouse, a man who took delight in small victories while water closed over his head. ■

Europe's new balance of power

Tilting east

WARSAW

The war in Ukraine has given fresh clout to eastern Europe. But this new influence may not last long

A VISIT FROM the German chancellor to the White House would once have been considered the pinnacle of Euro-American diplomatic relations. Yet when Germany's Olaf Scholz arrives in Washington for talks with Joe Biden on March 3rd, it might not even count as the American president's most important contact with Europe that fortnight. During a trip to Poland last week, Mr Biden met leaders of the EU's eastern fringe, heaping praise on them for their help with the war in Ukraine, from which he had just returned. The sense that the war has rejigged the map of who matters in Europe was palpable.

The countries on the eastern fringe of the EU feel their time has come. In their telling, a tectonic shift to the east is taking place. Power is rapidly seeping from the "old Europe"—delegitimised by having been so wrong for so long about Russia—in favour of countries now bearing the brunt of President Vladimir Putin's aggression. The war is an opportunity for fresh thinking and new leadership. "This is an existential moment for Europe as a whole," says Pawel Jablonski, a Polish deputy foreign minister. With Ukraine now a candidate to be part of the club one day, some dream that a new axis between Warsaw and Kyiv could provide a counterweight to the one between Paris and Berlin.

Not so fast. That the mood in European circles has shifted is in no doubt. That it will translate into enduringly more influence for countries such as Poland, the biggest of the "Bucharest Nine", is far less certain. (The Czech Republic, Hungary, Slovakia and the three Baltic states joined the EU together with Poland in 2004, followed by Bulgaria and Romania in 2007.) The region has wasted opportunities for a greater EU leadership role before.

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Even western Europeans accept that this is central Europe's moment. Warnings from former Soviet satellites about the risk of relying on Russia for gas used to be treated in Germany as over-anxious; now they are accepted as having been prescient. There is widespread admiration for the manner in which central European countries have taken in millions of Ukrainians fleeing war. The region's armouries have been drained to succour Ukraine—the first batch of Leopard tanks from Poland has just been delivered—and lots of new military kit ordered.

All this has given central Europe a measure of moral leadership—and a louder voice than ever at the EU table. "We always listened to them," says one western European diplomat. "Now perhaps we listen a little more." But the message from the east is not necessarily getting through.

One reason is a differing emphasis on the extent of the security threat. For Poland and other frontline states the threat from Russia is unlikely to abate soon. Leaders in the region have long said that Mr Putin's imperialist ambitions would turn to them ▸▸

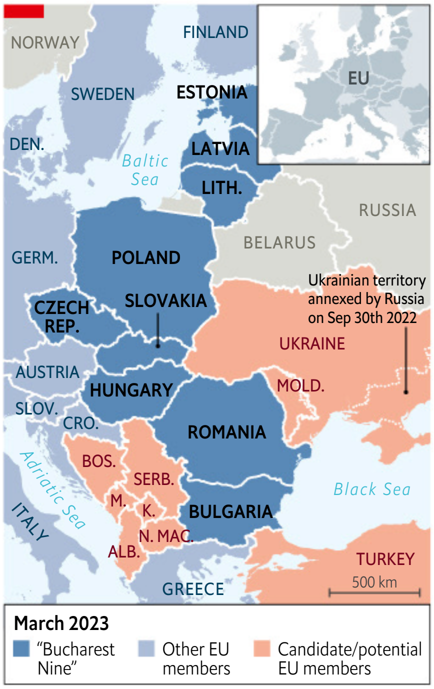
one day. "As long as Putin is in power, even if there is a truce in Ukraine, we assume it will be a pause in fighting, not a settlement," says Justyna Gotkowska of OSW, a think-tank in Warsaw.

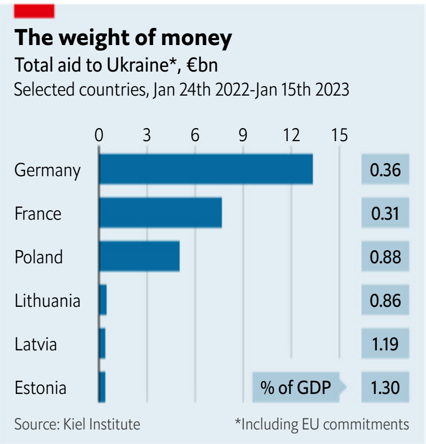
Western Europe, on the whole, tends to feel rather differently. Of course, Ukraine matters a great deal there as well: many billions are being spent on aiding the country, EU members' armed forces are being upgraded and the war has roiled the continent's economy. Finland is among those that share the security concerns of Poles and Lithuanians; hence its imminent joining of NATO.

But seen from Brussels, Dublin or Paris, life goes on despite the war. Energy systems have been rewired. The EU has faced lots of challenges in the past decade, whether around the euro zone, migration or Brexit. It will face more in coming years, no doubt. Ukraine is but one of them. While it is not quite business as usual, there is no reason to overthrow the old EU regime—the one in which central Europe has far less importance.

When EU leaders meet in Brussels, the focus is no longer just on Ukraine. Just as important is the manner in which Europe should react to a resurgence in illegal migration, say, or respond to America's green subsidies (the latter will come up during Mr Scholz's visit). This is baffling central Europeans, who can feel Mr Putin breathing down their necks. To them, discussing anything other than Ukraine is to underestimate—again!—the threat posed by Russia. Mateusz Morawiecki, Poland's prime minister, has spoken of the job he has to do to "wake up" the rest of Europe.

The life-goes-on approach is bad news for his country in particular. Poland might well hope that its starring role in the war would help resolve a long-standing row with the EU. The European Commission, the bloc's executive arm, has accused it of flouting basic principles of the rule of law. In its view, the government is packing courts with politicised judges, and seeking to undermine the primacy of EU law. This has proved a costly exercise: Poland is yet to get €35bn ($37bn) in grants and loans linked to a pandemic-era recovery fund.





The weight of money

Total aid to Ukraine*, €bn

Selected countries, Jan 24th 2022-Jan 15th 2023

Source: Kiel Institute

*Including EU commitments

Clout and charm

Seasoned Brussels hands point to other reasons for the region's lack of weight. Influence in the EU stems from population size and economic heft. Failing that, clever diplomatic footwork can help. In none of these areas does central Europe stand out.

Start with size. Taken together, the Bucharest Nine have a population of 95m, around a fifth of the EU total; their combined GDP is only about a tenth of the EU's total at market rates. Only one, Poland, counts as a big member state. Nor are they unified. Hungary is currently a pariah, given how its autocratic leader Viktor Orban has stood by Russia. More broadly, only in some fields are the interests of Romania aligned with those of Estonia, or those of Slovakia with Bulgaria. Extending the EU to Ukraine or the western Balkans would boost the figure, and the region's importance. But this is far from imminent, despite central Europe's persistent calls.

The group's economic weight has been rising, with living standards gradually closing the gap with western Europe. The need for Europe to repatriate some supply chains from China could give it further heft. But a lack of financial integration—Poland is not in the euro—somewhat limits its clout there, too. And all nine Bucharest countries get more from the EU budget than they pay in. In practice, that lowers their influence.

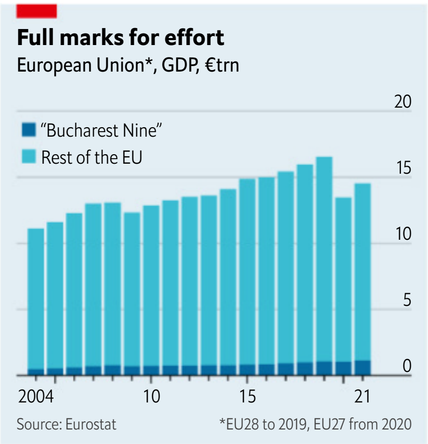
Poland and some of its allies also fail to punch their weight diplomatically. Small countries like Denmark and Ireland, and even some bigger ones like the Netherlands, can make up for their size by carefully crafting alliances and generating new ideas for the EU. Poland, notably, is not interested in this. "On any topic other than Ukraine, they don't even pretend to care," says one EU diplomat.

The conservative coalition in Warsaw, which has been in power since 2015, is often out of step with the more liberal consensus that reigns in Europe, for example on abortion or gay rights. That, and the rule-of-law saga, limits the appetite of many EU members to ally enduringly with Poland. An attempt at regularly including it in Franco-German deliberations, as one point in the so-called Weimar Triangle, has largely fizzled.

And virulent German-bashing by the ruling coalition is a recurring feature of Polish political discourse, which will only increase ahead of elections in the autumn. It includes a poorly thought-through demand for reparations for the second world war to the tune of €1.3trn ($1.4trn)—an amount so absurd that Germany has been able to shrug it off.

France, for its part, is frustrated that the Bucharest club shows little interest in bolstering the EU's "strategic autonomy", for example by increasing domestic arms production. Poland and the Baltics see NATO, and thus America, as the guarantor of their borders instead; it helps that NATO, a defence alliance, does not lecture them about internal matters like the situation of the courts. Poland's aggressive stance towards Germany might change if the pro-European liberal opposition wins in the autumn. Poland's suspicions about French machinations will not.

Countries in the EU gain influence through their ability and willingness to solve the continent's common problems. That requires a shared understanding of what those problems are. Poland and its allies will continue to be heard while the focus of Europe and the world is on what is happening near its borders. What happens after that is less clear. ■



Full marks for effort

European Union*, GDP, €trn

Source: Eurostat

*EU28 to 2019, EU27 from 2020

Ukraine's army

Noughts and crosses

KYIV

Ukraine finds stepping up mobilisation is not so easy

Ruslan Kubay was surprised to receive a draft notice in late January. Registered as seriously disabled since childhood—Mr Kubay is missing both hands—he falls under a list of automatic exemptions from service. Even more surprising, however, was the reaction of officials at the local registration office in Drohobych, near Lviv. Far from admitting their error, they doubled down and declared him fit for service. Only a social-media post and a subsequent national scandal reversed the decision.

Mr Kubay's case was an extreme, but far from isolated, incident. Ukraine has visibly stepped up mobilisation activities in the first two months of this year. There have been reports of draft notices issued (and sometimes violently enforced) at military funerals in Lviv, checkpoints in Kharkiv, shopping centres in Kyiv and on street corners in Odessa. Popular ski resorts lie deserted despite the first proper snows of the winter: footage of military officials snooping around on the slopes was enough to keep the crowds away. In every town and city across the country social-media channels share information about where recruitment officers may be lurking.

Mobilisation has been going on since the beginning of the war. By contrast with Russia, the process is not hidden: in February President Volodymyr Zelensky extended martial law and general-mobilisation legislation for the sixth time. But there have been big changes since December. Previously only members of Ukraine's draft commission were allowed to issue notices, and only to home addresses. Now a wider group of officials can issue the two-part document, with no geographical limitation. Another difference is over who is being called up. In the first wave most of the recruits were voluntary; queues outside draft offices were a frequent sight. Now officials are recruiting from a much less enthusiastic crowd.

In December Ukraine's top soldier, Valery Zaluzhny, told *The Economist* there was no immediate need for massive mobilisation; his main problems were armour and munitions. Sources within the general staff insist that is still the case. Moreover, there are natural limits to the numbers of soldiers Ukraine can absorb, says Viktor Kevlyuk, a reserve colonel. "You can't mobilise 6,000 if your training ranges can hold only 3,000," he says.

But force ratios, which once favoured Ukraine, have since tilted back towards Russia, which has mobilised at least 250,000 men since ordering partial mobilisation in September. Meanwhile, Ukraine's military leadership has been charged with building a reserve in advance of an expected counter-offensive. New Western hardware is arriving, and it needs to be manned. Heavy attrition rates in close-contact fighting on the eastern front around the embattled town of Bakhmut need to be balanced with new men.

Not all who get draft notices are actually inducted; sometimes the notices are simply a way to get every potential recruit on the books. Even for those who get one, there are ways of getting around it. There are legal exemptions for illness and disability—either of the draftee or of a dependant. Single parents and fathers with three or more children are off the hook as well. Students can defer service. Certain professions also receive what is known locally as *bron*, or protection from call-up.

The government has extended this to key workers in the energy, transport and agriculture sectors. Many IT staff have six-month exemptions. Alex, an IT professional who handles his company's relations with the government, says the state understands how vital his sector has become to the war effort. "It's one of the only areas of the economy still generating hard currency. Many of us are also working pro bono on military projects in AI, surveillance, counter-espionage and other classified technologies."

In a country like Ukraine there are inevitably less-than-legal ways to escape the call-up, too. "It's a dialectic of nature," says Colonel Kevlyuk, who worked in the army's general staff until 2021. "Wherever there is demand, you'll always find someone to supply it." Some arrange fictitious marriages with mothers of three or more children. Others get corrupt military doctors to issue a medical exemption. For a few thousand dollars one can pay to be smuggled across the border. But the appetite for risk is falling after a series of well-publicised draft-dodging prosecutions.

Government officials say that any excesses are being tackled as they come to light. But with the army set on achieving a breakthrough on the battlefield before the summer, the recruitment of less-motivated Ukrainians will surely be stepped up and scandals will probably persist. The armed forces may respond to legal challenges by sharpening up their bureaucracy, but there are other ways to deal with them. Informed sources say that at least two lawyers disputing draft orders have abruptly been called up themselves. As the army well knows, mobilised lawyers are automatically barred from practising. ■

Turkey

No way out

GAZIANTEP AND KAHRAMANMARAS

Syrian earthquake survivors in Turkey have nowhere to go

Somewhere in the debris of the apartment building in Kahramanmaras where he had stayed with his brother's family are Jamal's jacket, his wallet, phone and identity papers. They are all he has left. Friends rescued Jamal, a young refugee from Syria who has made Turkey his home over the past five years, from the collapsed building hours after the first earthquake. Days later, rescue workers retrieved the bodies of his brother and his four children. Jamal spent a week in hospital, with injuries to his back and his legs, then returned

Losing everything, again

to look for his valuables in the rubble.

Syrians are no strangers to destruction, displacement, and to burying their loved ones. The 3.7m who settled in Turkey in the past decade, having escaped Syria's murderous war, had hoped to spare their children the same fate. Many such hopes collapsed on February 6th, when a pair of earthquakes ripped through southern Turkey, home to almost half of the country's Syrian refugees, killing at least 45,000 people. Hundreds of thousands of Syrians, as well as their Turkish neighbours, lost everything, again.

The path of destruction stretches for 500km, with some towns and villages entirely wiped out. A cloud of yellow dust, the result of excavations and new building collapses, envelops Kahramanmaras. Bodies continue to be pulled from the rubble, no longer by rescue teams, who have returned home, but by excavators. Across the region over 200,000 buildings have been destroyed, damaged or slated for demolition. The World Bank estimates the cost of the damage at more than $34bn, or 4% of the country's GDP.

The quakes have ruined the lives of millions of people. At least 1.5m are homeless, and forced to sleep in tents, or to move to other parts of the country. Much of the local economy has ground to a halt. On the eve of the earthquake, Antakya, an ancient city on the Mediterranean, was home to 400,000 people; now only a fraction remains. In the old city centre, the streets have turned into valleys walled in by mountains of rubble. Aftershocks are bringing down some of the buildings spared by the first quakes.

Syrians in Turkey have been affected disproportionately. Turkish survivors can try to rebuild their lives and look for jobs elsewhere. Syrians, however, cannot move out of the provinces where they are registered. Those found doing so risk being deported. Some say they hope to find work when reconstruction gets going. But hundreds of thousands of them are now homeless, jobless and stuck. Ahmed Diab, a refugee who has spent the last decade in a container camp south of Kahramanmaras, used to make ends meet by doing odd jobs in the city. "But there's no work now, and we don't have anywhere to go," he says. "We won't survive without any support."

Some of the refugees complain that rescue teams took days to reach Syrian neighborhoods. But this was the case in much of the region. Turkey's president, Recep Tayyip Erdogan, has faced a mounting outcry over delays in the emergency response, which may have cost thousands of lives.

When it comes to earthquake assistance, the refugees do not appear to face discrimination at the official level. Syrian survivors are eligible for the same one-time handouts of 10,000 lira ($530) and 3,000 lira monthly rent subsidies as Turkish ones. Tents are distributed equitably too. But many refugees see signs of mounting hostility. Syrians are routinely accused of hoarding emergency aid or looting abandoned homes. At a tent camp in Nurdagi, another destroyed town, a fight broke out after a group of Turks told the refugees to go back to Syria. Some Syrians say they have been kicked out of queues while waiting for aid, or told by prospective Turkish landlords that refugees are not welcome as tenants. Others, though, say the disaster has brought the two sides together. At the container camp near Kahramanmaras, Syrians displaced by war are living side by side with Turks displaced by the quake. "There's no racism here," says Mr Diab.

Some Syrians have given up on life in the earthquake zone, at least in the near future. More than 40,000 have travelled to rebel-controlled northern Syria since the quake, though many will probably come back. Jamal has another plan. Once he finds his ID and savings, he will leave Kahramanmaras for good, and move to Istanbul. "They will send me back to Syria if they catch me," he says, referring to the Turkish authorities, who have deported thousands of refugees over the past few years, often for petty crimes or for not having the right papers. "But there is no future here," he says, overlooking the ruins of his brother's home. "I have nothing more to lose." ■

Italy's Democrats

Changing times

ROME

The country's two largest parties are now led by women

SUDDENLY THERE are not one but two women at the top of Italian politics. On February 26th the members of Italy's centre-left Democratic Party (PD) confounded forecasts by electing as their new leader a 37-year-old radical, Elly Schlein. She was, and is, an outsider in more ways than one. Ms Schlein grew up in Switzerland and has dual American and Italian nationality. She is in a relationship with a woman and was not even a member of the PD until recently, having quit back in 2015 in protest at the labour-market liberalisation policies of Matteo Renzi, a former PD prime minister.

Ms Schlein's election has about it both the feel of a wind of change and that of an air of desperation. It signals the latest advance for women in a country that has notably lagged behind others in Europe in terms of female political representation. Until 2013 less than 20% of Italy's parliamentarians were women—a lower proportion than in Afghanistan. Today, the figure is 31% and since October Italy has had a female prime minister in Giorgia Meloni, the leader of the hard-right Brothers of Italy (FdI) party.

A Schleiny new image

Ms Schlein's victory will also come as a shock to her party's deeply entrenched old guard. But then a key reason why the PD's voters turned to Ms Schlein was that in recent months the leadership of their party had turned from a disappointment into an embarrassment. The PD slumped to a mere 19% of the vote in the general election in September. By November it had been overtaken in the polls by the maverick Five Star Movement (M5S), which is trying to project itself as Italy's leading opposition party even though it has fewer lawmakers. In recent soundings the PD has averaged a miserable 16.4%, against 17.7% for the M5S. Ms Schlein's immediate task will be to reverse that reversal.

A more pressing issue is whether she can offer effective opposition to the similarly radical Ms Meloni. Backed by a four-way coalition and an outright majority in parliament, Ms Meloni has so far had a remarkably smooth ride. Her strength, though it could yet become a weakness, has been her conversion to moderation. Far from distancing Italy from the rest of Europe, as some had feared, Ms Meloni has enthusiastically supported NATO's position on Ukraine and steered through parliament a budget for 2023 that broadly respects the European Commission's insistence on fiscal prudence. Both policies leave her open to attack from within her own coalition—and by the interesting Ms Schlein.

Charlemagne | Bulldozing to victory

After seven years of Brexit talks, Europe has emerged as the clear winner

IN 2020 BRITAIN devised a new tactic to insult its European neighbours, a long-standing hobby. The diplomat representing the EU in London would henceforth be denied the rank of full ambassador, a courtesy routinely granted to the bloc despite its not being a country. Instead, the Man from Brussels would be granted the lowlier status as an envoy of an international organisation, sending him tumbling down the protocol order. (The plan was later reversed after the EU reciprocated.) Contrast that with this week, when the head of the European Commission, Ursula von der Leyen, was invited to meet King Charles III at Windsor Castle. Forget the tabloid barbs about unelected Eurocrats; a royal aide dubbed her a "world leader" of the sort worthy of high tea. Whatever the opposite of a diplomatic snub is called, this was it.

Ms von der Leyen's tea capped a watershed visit. On February 27th she reached an agreement with Rishi Sunak, the prime minister, on how to handle issues pertaining to Northern Ireland (see Britain section). This had been the last and most intractable piece of the Brexit puzzle, because the region needs somehow to remain largely part of both the EU's single market and the United Kingdom, to avoid having to reinstate a previously troublesome border with Ireland. A complex deal has put the issue to bed. The divorce between Britain and Europe had legally been pronounced in 2020, four years after the referendum in June 2016. But only now do we know what the future living arrangements will look like.

Wonks are currently poring over the "Windsor framework". It looks like a balanced agreement that allows both sides to save face and move on. Looking at the overall shape of Brexit as it has been haggled over in the past seven years, however, leaves a different impression. Just a glance at the cast present at the final stage of Brexit talks offers a hint of which polity has had a rougher time since talks began. Mr Sunak is Britain's fifth prime minister since the referendum, and his Conservative Party is headed for a thumping defeat next year, thanks in no small part to endless spats over Brexit. Ms von der Leyen by contrast is just the second person in her job in that time, and will probably get another five-year term next spring. The manner in which Britain left the EU has turned into a national psychodrama; polls indicate most Brits think leaving the club was a mistake. In Brussels dealing with Britain's latest twist was only an occasional agenda point.

Vote Leave campaigners had claimed London would "hold all the cards" in talks with the EU. In fact the opposite turned out to be true. Britain imagined it could craft a way to leave the union but retain the stuff it cared about, like some access to the single market. Or did it? In truth nobody ever worked out what Britain really wanted. Setting priorities was terribly square for the likes of Boris Johnson, the dishevelled foreign-turned-prime minister who steered Britain through much of the haggling. Far better to quip about wanting a cake and eating it too. A rotating cast of Brits arrived in Brexit talks with fuzzy notions of being treated like Switzerland or Ukraine. Opposite them were seasoned Eurocrats carrying weighty briefing packs pointing out why that was not to be.

This was no whizz team to beat at the negotiating table, yet the EU deserves plaudits. Its own aims were clear: Brexit should be a one-off event, not serve as a precedent. No country remaining in the EU could be in any doubt that departing from the club would leave it worse off. To achieve this, Britain would need to get a raw deal. London had hoped it could divide and conquer the remaining 27 members of the EU. An often savvy negotiator for its own interest in the 47 years it was a member of the bloc, it turned out to be all at sea negotiating against it. Michel Barnier, a former French foreign minister who became Brussels's point man on Brexit, ensured national capitals were kept fully up to speed in the talks.

When it came to the nitty-gritty of coming to an agreement on terms, the triumph of the EU side was to play to its reputation as an inflexible bureaucracy capable only of ticking boxes. Countries looking to join the EU are familiar with this approach—here's what you have to do, now do it—which was broadly recycled for the only country trying to leave it. Once the 27 remaining countries had decided among themselves what they thought was fair, Britain had little choice but to jump through hoops designed by its negotiating foes. The tone was set early on. Britain had to agree to pony up over £35bn ($42bn) to get to the next stage of talks, for example, to fund its share of future Eurocrat pensions. It tried to quibble but ultimately just had to pay. And so it went.

One last insult for the road

In an irony that slews of discarded Brexit negotiators in London will not have missed, the Windsor deal shows the inflexible-EU approach had been an act all along. It turns out the commission had lots of scope to accede to British demands, and ask for permission from member states later. It just hadn't wanted to before. Indeed, Britain has achieved a better deal than anyone expected, though that may not be saying much. In part that is because the EU had long ago achieved its main aim: not even the maddest populist on the continent thinks leaving the club would leave it better off nowadays. The departure of Mr Johnson, once a purveyor of souped-up Brussels-bashing stories for the *Daily Telegraph*, also helped. The war in Ukraine has stressed the importance of continental unity: Britain remains a key NATO ally. America pressed both sides to do a deal. Having bulldozed its way to negotiating victory, the EU saw little point in hammering home the point.

The offer of a royal meet-and-greet was but one sign that a happier relationship between Britain and the continent may be in the offing. Nothing is likely to change in the short term: Europe has continent-wide elections next spring, a few months before Britain goes to the polls. For now all sides are relieved that, after seven years of talks, this deal is finally done. But one side has quite a bit more to be happy about than the other. ■

ADVERTISEMENT

Back to Blue

An initiative of
Economist Impact and The Nippon Foundation

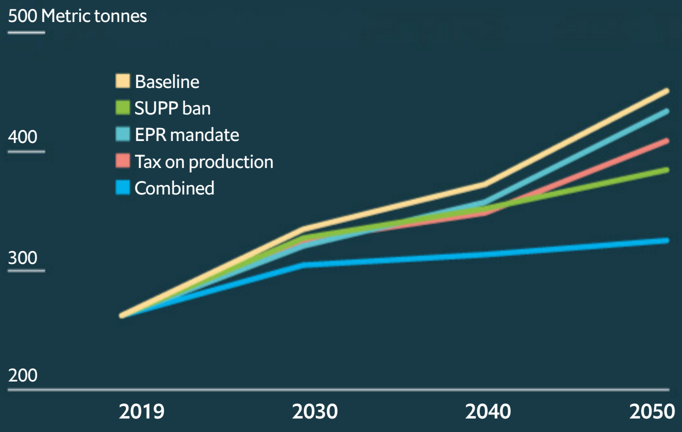
PEAK PLASTICS: PLASTIC CONSUMPTION TO SOAR WITHOUT AMBITIOUS UN TREATY

The world will continue to drown in plastic waste unless a bold and comprehensive set of policy changes is applied, according to Back to Blue, an initiative of Economist Impact and the Nippon Foundation. The research has modelled the impact of three key policies that cover the entire lifecycle of plastic, from production to disposal. These are approaches that are being considered by negotiators in an effort to forge a legally binding United Nations treaty to reduce plastic pollution by 2024.

These three policy levers—a ban on problematic single-use plastic products; "polluter pays" Extended Producer Responsibility (EPR) schemes for full end-of-life costs; and a tax on virgin plastic production—Economist Impact found that all failed to prevent the relentless rise in plastic consumption. Only a combination of these policies and bolder action, including possible restrictions on virgin plastic production, will bring about "peak plastic" and see consumption slow in the future. If the negotiators fail to agree on any policy interventions, our research projects that plastic consumption in the G20 countries we studied will nearly double by mid-century.

FAREWELL TO THE PIECEMEAL APPROACH

All three scenarios we modelled fail to produce a peak in plastic consumption, suggesting more-ambitious policies will be required to achieve that goal



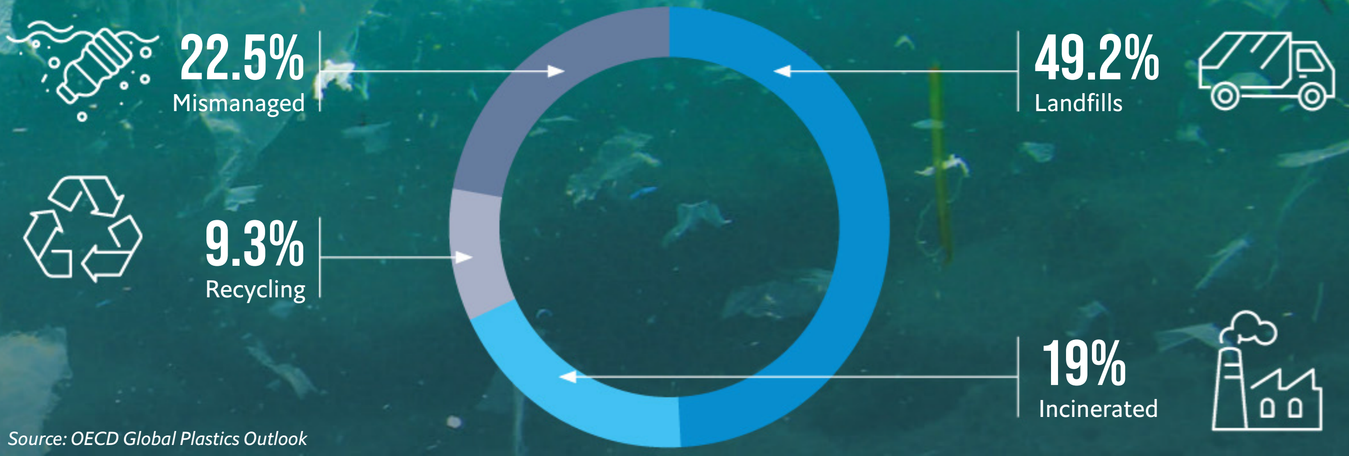
Source: Economist Impact, 2023

Key findings:

- Only bold and sweeping reforms will bend the curve. A combination of all three approaches still leaves plastic consumption rising at an alarming rate. More stringent conditions than we have considered will be needed to bend the consumption growth curve.
- A ban on problematic, unnecessary single-use plastic items yields the heaviest impact. Developed economies need to be more aggressive with banning non-essential single-use plastic products, as they have the resources and infrastructure to implement and enforce stricter bans. However, this policy measure must be complemented by EPR schemes that will help alleviate the burden of waste collection in less-developed economies.
- EPR will have a minimal effect on consumption but is a vital part of the solution to reducing plastic pollution and shifting the burden of waste generation onto producers and brands. EPR schemes will improve waste collection and increase recycling rates. They have the potential to drive innovation in the design of circular solutions, with alternatives becoming more cost-competitive as a result.
- A carbon tax on virgin plastic must be aggressive to be impactful. In tandem, the production of virgin plastic must be capped—the least desirable outcome for powerful industry interests.

A LOAD OF RUBBISH

% of total plastic waste, and end of life fate



Source: OECD Global Plastics Outlook

Hard to swallow

UN treaty negotiations are often fraught with infighting as parties want to demonstrate willingness without giving up too much ground. But loose, aspirational goals are not enough. Big plastic producers, consumer-goods firms, governments and environmental groups must advance ambitious policies that contain soaring plastic consumption.

"Back to Blue's research is a timely call for urgent, ambitious solutions to the plastic crisis. Plastic pollution extends beyond all borders, impacting the health of the ocean and natural environment. It will take global co-ordination to address the scope and scale of this issue," said Yohei Sasakawa, chairman of the Nippon Foundation.

The scale of the problem is huge. Since the 1950s, global plastic production has soared from a mere 2m tonnes annually to over 400m tonnes today, according to estimates by the Organisation for Economic Co-operation and Development (OECD). Some 11m tonnes of plastic entered the ocean in 2016, adding to the estimated 150m tonnes already in the ocean (SYSTEMIQ, The Pew Charitable Trusts, 2020). Driven by economic and population growth, mismanaged plastic waste—that is, rubbish that could seep into the natural environment—could almost triple by 2060.

Beyond the harm posed to the marine and land environments, plastics are also a substantial contributor to greenhouse-gas emissions. Throughout their lifecycle, plastics have a significant carbon footprint and emit 3.4% of global greenhouse gases, mostly during production and conversion. A reduction in virgin plastic production offers the biggest reduction in pollution and mitigates its contribution to global warming.

If nothing else, the treaty should go some way to address the inequality of the plastic pollution crisis. Poorer countries will continue to be disproportionately affected if we fail to produce a peak in plastic consumption. They lack the resources and infrastructure to manage plastic waste and do not have the budget to roll out sustainable alternatives. Meanwhile, richer nations continue to ship their plastic scraps to Asia and elsewhere, significantly contributing to their waste burden.

The UN Treaty on plastic pollution is a unique opportunity for governments, businesses and innovators to tackle the plastic scourge. "Achieving a reduction in plastic pollution is going to require all the stakeholders implementing all the known solutions," says Winnie Lau, project director, Preventing Ocean Plastics at The Pew Charitable Trusts. A piecemeal approach will simply not cut it.

For more, please visit:
backtoblueinitiative.com/peak-consumption/

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Ron DeSantis

International man of mystery

MIAMI

Does the governor, and likely presidential candidate, have a foreign policy?

One sign of an impending presidential campaign is the appearance of a memoir marketed as a tell-all that, in fact, tells little. On February 28th Ron DeSantis, the Republican governor of Florida, who many donors think is the party's best chance to thwart Donald Trump's re-run for the White House, gave his entry to that literary tradition when he published his book, "The Courage to Be Free". Mr DeSantis owes his status among Republican primary voters, who are torn (early opinion polls suggest) between him and the former president, to his bare-knuckled prosecution of domestic culture wars around the teaching of critical race theory, covid-19 lockdowns and censorship of conservatives on social media. But while an ambitious governor may concern himself only with a war on wokeness, a president must manage war.

Already, foreign diplomats in Washington have been scouring Mr DeSantis's scant public comments and past political record to guess how he would remake America's foreign affairs and trade relations. Some are cosying up to the Israelis, with whom Mr DeSantis has been close since his days as a congressman, in the hope that they have the scoop. The book might have helped fill in some gaps, they thought. Unfortunately for them, the queries will have to continue for a while longer. The book is not a deep meditation on international affairs but a positioning document for the bruising primary election to come—offering only some clues and few details on how a President DeSantis might manage policy on China, Ukraine and trade.

Despite the book's title, Mr DeSantis does not yet have the courage to criticise Mr Trump, whom he praises lavishly throughout. Whereas the governor takes the time to disparage the "messianic impulse" of the neoconservatives who dominated during the presidency of George W. Bush, the nationalism and protectionism of the Trump era earn warm praise. Mr DeSantis writes that, along with rightly building the wall on the Mexican border, Mr Trump "also rightly ripped American failures at home, notably the outsourcing of manufacturing from our heartland to mainland China; and abroad, the endless wars in Iraq and Afghanistan".

Questionable moments like the Trump administration's withdrawal from the Iran nuclear deal, or from the Paris climate accords, or the Doha Agreement in 2020—which set into motion the Taliban takeover of Afghanistan in 2021—are not discussed much and certainly not criticised. He takes some credit for Mr Trump's decision to relocate the embassy in Israel from Tel Aviv to Jerusalem, saying that the warnings about the cataclysmic consequences of doing this confirmed "the bankruptcy of our bureaucratic 'expert' class". (The rottenness of the deep state and the "national legacy press [that] is the praetorian guard of the nation's failed ruling class" are recurring themes.)

Foreign policy is of so little concern to American voters in the abstract that presidential candidates tend to describe their stances in domestic terms. Mr Trump wanted to return to an era when America was first, which meant slapping tariffs on allies and competitors alike and threatening to leave NATO. President Joe Biden—

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who said that "there's no longer a bright line between foreign and domestic policy"—has alternated between describing his ideas as a pedestrian "foreign policy for the middle class" or as a grand, existential contest between democracies and authoritarians. That framing, which annoys China's president, Xi Jinping, is meant to evoke the shameful attack on the Capitol by Trump supporters on January 6th 2021. This is true of Mr DeSantis, too, who views America's foreign and domestic blunders as the result of the same phenomenon: a reliance on a decadent, globalist elite who "embrace policies that ignore the importance of national sovereignty, favouring open borders and a 'global economy'".

As a congressman, Mr DeSantis was a noted Russia hawk, who urged the Obama administration to provide lethal aid to the Ukrainians after the illegal annexation of Crimea in 2014. As he contemplates a presidential run, Mr DeSantis is a critic of Mr Biden's "blank-cheque" policy on Ukraine which does not have a "strategic objective". This is not quite the same disengagement as that of Mr Trump, who now seems to want to cut support, but is out of line with the views of other mooted Republican contenders—like Mike Pence and Mike Pompeo—who are more staunchly supportive of Ukraine.

While in Congress, Mr DeSantis voted to expedite the Trans-Pacific Partnership, a trade initiative launched by Barack Obama, which floundered. Now, in line with his party, Mr DeSantis is quiet about trade deals. Like almost all Republicans and most Democrats, he is hawkish on China and in 2021 signed legislation aimed at cracking-down on theft of corporate secrets and intellectual property in Florida.

Mr DeSantis is a shrewder politician than his pugilistic reputation may suggest. He has managed to appeal to all the factions of his party—the MAGA diehards, the cosmopolitan donor class and the religious right—by hewing to a strict policy of strategic ambiguity. Abortion is mentioned only in passing in his new book, for instance; January 6th, not at all.

Although Mr Trump has been itching for a fight, searching for provocations in Mr DeSantis's public statements, the governor has refused to punch back. The other anticipated contenders for the nomination are also refraining from attacking Mr Trump, who remains popular with the base. Nikki Haley, a former governor and member of the Trump cabinet who has declared her candidacy, recently dodged a question on how she differed from her former boss. The *Foreign Affairs* essays on how the Florida governor's worldview differs from Trumpism can wait until after the nomination contest, it seems. Until then the placeholder DeSantis doctrine will be to say little and change the subject. ■

Student debt

Relief pitch

NEW YORK

The Supreme Court looks askance at Joe Biden's student-debt forgiveness

INACTION IN CONGRESS has led recent presidents to resort to creative workarounds. When he failed to get immigration reform through Congress, Barack Obama issued executive orders to shield some immigrants from deportation. Donald Trump declared a national emergency to divert funds to build his border wall. And Joe Biden has cited covid-19 as justification for barring evictions, requiring vaccinations and, last August, forgiving up to $20,000 in debt for student borrowers.

Mr Obama and Mr Trump squeaked out majorities at the Supreme Court to keep their programmes intact. Mr Biden has had less success. In 2021 and 2022 the justices struck down his federal eviction moratorium and a vaccine-or-test mandate that would have applied to 84m employees. On February 28th a pair of oral arguments suggests the majority is inclined to put his student-debt plan on the chopping block, too.

Student borrowers have enjoyed a nearly three-year hiatus from loan payments. Mr Trump began the forbearance in March 2020, in the early days of the pandemic, and extended it twice. Mr Biden issued six extensions before deciding last summer to couple a restart of payments with wiping away up to $10,000 of debt for borrowers making under $125,000 a year and twice that for poorer students. A flurry of lawsuits halted relief while the courts sort out the legality under the HEROES Act, a 2003 law that also underwrote the three years of paused loan payments. The Biden administration says the law clearly authorises forgiveness, as it permits the secretary of education to "waive or modify" provisions of student financial assistance when a "national emergency" threatens to put borrowers "in a worse position financially".

STUDENT LOAN
RELIEF
IS LEGAL

The justices may disagree

Scepticism from conservative justices flowed throughout the three-and-a-half hours of arguments in *Biden v Nebraska* and *Department of Education v Brown*. Justice Clarence Thomas said payment forbearance "fits more comfortably" in the terms of the HEROES Act than debt cancellation. Justice Neil Gorsuch suggested the policy may be unfair to people who have already paid off their loans or planned their lives "around not seeking loans". Chief Justice John Roberts wondered why a college graduate should get his loan written off while an entrepreneur is on his own to repay a loan to start a lawn-care business.

Several justices balked at the $400bn-plus price tag. Invoking the "major questions doctrine", Chief Justice Roberts and Justice Samuel Alito suggested to Elizabeth Prelogar, Mr Biden's solicitor-general, that such spending should be specifically authorised by Congress. As a policy with "vast economic or political significance", James Campbell, Nebraska's solicitor-general, said, it is not a move the executive branch should undertake on its own. In reply, Ms Prelogar noted that the debt-payment pauses cost the government $150bn without raising any hackles.

There is a possible hitch in the conservative majority's inclination to strike down Mr Biden's plan: only plaintiffs who stand to be directly injured have the right to bring a lawsuit. The lawyer in *Brown* struggled to show how his clients—student borrowers upset they would gain little from the policy—had standing to sue.

The three liberal justices and Amy Coney Barrett focused on whether a projected fall in revenues for the independent Missouri Higher Education Loan Authority, which opted not to sue on its own behalf, gave Missouri the right to challenge Mr Biden's debt forgiveness. In a possible appeal to Chief Justice Roberts, who is a stickler on standing, Ketanji Brown Jackson urged caution. The justices should be "concerned about jumping into the political fray" involving such a hotly debated issue, she said, "unless we are prompted to do so by a lawsuit that is brought by someone who has an actual interest".

If the three liberal justices persuade two conservatives to side with them on the technical hitch, the 26m student borrowers hoping for relief may yet see some of their debt absorbed by the federal government. More likely—when the court issues its decision by the end of June—Mr Biden's plan is headed for the dustbin. ■

Dilbert's demise

Misleading polls

WASHINGTON, DC

Scott Adams's racist comments were spurred by a badly worded poll

DILBERT AND Dogbert, a cartoon office worker and his canine companion, have been staples of the American funny pages for three decades. The comic originated as a satire of the white-collar office, and poked fun at mismanaging bosses and time-wasting meetings. But in recent years Scott Adams, the creator of the oddly shaped bespectacled office worker, has drawn strips on corporate diversity quotas and whether people should be able to choose their pronouns. On February 22nd Mr Adams appeared in a YouTube live-stream in which he called black Americans a hate group and advised white people to "get the hell away" from them. The partner publications of "Dilbert" quickly condemned Mr Adams and announced they would stop publishing the comic.

Like the office workers he satirised, Mr Adams's career suicide was partly down to abusing data. His source appears to be a poll from Rasmussen Reports, which according to Mr Adams showed that "nearly half" of African-Americans are "not OK" with white people. "That's a hate group," Mr Adams said. "I don't want to have anything to do with them."

The comic-creator's comments misconstrue two numbers from the poll, however—and the survey itself is confusing. The poll, which Rasmussen released on February 22nd, asked Americans whether they agreed or disagreed with the statement: "It's OK to be white". Seventy-two per cent agreed with this, and 12% disagreed.

Rasmussen was quick to highlight an outlier group: 53% of black Americans said it is "OK to be white", while 26% disagreed. In addition, 21% of black adults said they were "not sure" how they felt. Mr Adams appears to have added the last group to the share disagreeing that it's acceptable to be white. (In the video, Mr Adams says he has been "identifying as black for years now" because he likes "to be on the winning team".)

Many respondents were probably confused by the bizarre question, stuck into a survey that also asked about Joe Biden's approval rating and whether respondents believed they had suffered "major side effects" from covid-19 vaccines. Indeed, 17% of respondents said they were "not sure" how they felt on the race question. According to Matthew Graham, a scholar of survey research, the higher-than-average share of undecided respondents indicates the question is poorly understood not just by those who answered "not sure", but by those who gave an answer, too. It is possible that some people simply said they disagreed with the question because they were not themselves white, for example.

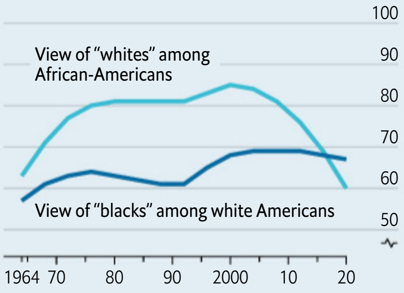
Social scientists tend to ask people how they feel about racial groups using a "feeling thermometer" scale. That is where a respondent ranks a group on a scale of "coldly" to "warmly" from 0 to 100. According to *The Economist*'s analysis of such data from the American National Election Studies, a quadrennial academic survey, 60% of black Americans in 2020 rated whites warmly (at least a 51 out of 100). Meanwhile 67% of whites rated "blacks" warmly. Until recently, black Americans felt more warmly towards whites than vice versa. That changed in 2016 (see chart).

According to the Anti-Defamation League, the statement "it's OK to be white" was created by white supremacists on 4chan, a message-board site, as a way to provoke progressives into condemning the statement—proving how unreasonable they were being. A nonpartisan pollster would probably have avoided asking such a question.

Mark Mitchell, Rasmussen's head pollster, defended the survey against the "haters" and "anti-polling troglodytes" questioning his methods. He says that the firm is asking reasonable questions that "the media" is not covering; that he knows what America "really thinks" and it's not what's being reported by the news. Perhaps what Rasmussen Reports is really after is attention. If so, it got what it wanted.

True colours

United States, % of respondents who feel warmly* towards group



Sources: American National Election Studies; *The Economist*

*Rating above 50 on a "feeling thermometer" from 0-100

Chicago's mayoral election

Cops v teachers

CHICAGO

The Windy City faces a choice between two starkly different candidates

BY THE TIME Brandon Johnson arrived on the stage at the El Palais Bu-Sché banqueting hall in Chicago's long-neglected Far West Side, a few hours after the results of the first round of the city's municipal elections began to trickle in, the crowd was already at full throttle. Minutes before, a speaker had announced: "we showed tonight this entire city that good can defeat evil." It took all of Mr Johnson's charisma to quell the cheering. He did so with a tale of his time as a public-school teacher, in Cabrini-Green, a now-demolished public-housing project near the city centre. Students, he said, "could walk to one of the wealthiest neighbourhoods in the entire city of Chicago", but they also could see "bulldozers…preparing to destroy their public housing". As mayor, he promised, he will "retire this tale of two cities".

Mr Johnson was the runner-up in the first round, with a little over 20% of the vote tallied by March 1st (outstanding postal votes were still being counted). Having been a little-known member of the Cook County Commission just a few months ago, he pushed ahead of seven other candidates with the backing of the Chicago Teachers Union, which donated millions of dollars to his campaign. On April 4th he will face Paul Vallas, a conservative-leaning bureaucrat, who came first, with around 34% of the vote. Lori Lightfoot, the incumbent mayor, was pushed out, having attracted only 17%.

After a relatively low-energy first round, the run-off promises to be more explosive. It will test how electable a far-left candidate truly is, even in a heavily Democratic city. It will also set two of Chicago's biggest public-sector voting blocs—teachers and cops—in direct competition.

Though both are Democrats, Mr Vallas is practically the polar opposite of Mr Johnson. As a schools administrator in New Orleans, he took on the teachers union to close public schools. As a candidate for mayor—his second attempt—he has been backed by Chicago's Fraternal Order of Police (FOP), the police union. The FOP is run by John Catanzara, a Trump-supporting firebrand who retired early from the police department in 2021 after accumulating dozens of disciplinary complaints. At his own election-night party, held at an event space called "City Hall" in the trendy West Loop, Mr Vallas promised to "make Chicago the safest city in America".

▸▸

Predicting which of the two will win is tricky. Mr Vallas has run a disciplined and effective campaign, focused almost exclusively on crime. He promises to hire more cops. His route to the top of the ticket, however, was almost certainly helped by the fact that he was the only white candidate in the race.

He drew the most support from wards on the outer edge of the city, heavily populated by what Chicagoan politicos still occasionally call "white ethnics". To win, he will have to pick up a reasonable chunk of more conservative black and Latino voters. That perhaps explains why, having attacked her for months, in his election-night speech he praised Ms Lightfoot.

Mr Johnson's potential route to victory, by contrast, is by consolidating the votes of the other progressive candidates he beat in the first round. Though his home base is on the mostly black West Side, he did best among left-leaning young white urbanites in fast-gentrifying areas such as along Milwaukee Avenue, the core of Chicago hipsterdom, whom he productively courted late in the campaign. In February he backed away from ideas he had flirted with, such as taxing suburban commuters, and belatedly announced a transport plan to improve the city's dysfunctional trains and buses. But to raise his total to 50%, he will have to do more to persuade the voters who passed on him first time that he is not too left-wing.

Both candidates have made past statements that they will need to play down. After the death of George Floyd in 2020, Mr Johnson described defunding the police as a "real political goal". He now scrupulously avoids that slogan, instead saying that he would train and promote more detectives, while using social workers to "free up law enforcement to focus on truly violent offences". Mr Vallas, meanwhile, will have to back away from the extremes of his supporters like Mr Catanzara, as well as comments he made over a decade ago, when he said he was "more of a Republican than a Democrat now" and that he "fundamentally" opposed abortion. On election night he described himself as a "lifelong Democrat" and reiterated that he is in favour of abortion rights.

The reality is that whoever wins will face formidable challenges. Should Mr Johnson triumph, he will struggle with economic reality. The pressure of a huge pensions deficit and already-high tax rates limit the amount any mayor has to spend on social projects. Mr Vallas, for his part, may find it hard to reduce crime without reforming a police department that sometimes seems to think beating people up is an alternative to investigating murders. Still, Chicago's voters for once have a clear choice. Politicians in other cities will be watching closely. ■

Abortion pills

The road from Amarillo

WASHINGTON, DC

Legal fights in Texas and West Virginia could have far-reaching consequences

THE FIGHT over access to abortion in America was never going to end with the overturning of *Roe v Wade*. Last summer the Supreme Court returned the matter to individual states. One side vowed to battle until every woman regained the right to choose an abortion. Their opponents said they would not rest until the procedure was banned across the country. The fight at first focused mostly on physical clinics, but has expanded to abortion medication. Both sides believe these pills are the key to getting what they want, and are using the courts to try to get there.

Depending on your perspective, abortion pills are either a saviour or the devil. They are small enough to pop discreetly into an envelope and send across borders. They are undetectable in blood, so a woman who takes one can claim to have had a natural miscarriage. As they are less invasive and cheaper than surgical abortions, patients often prefer them for first-trimester terminations. The Food and Drug Administration (FDA) has gradually made it easier to access such pills, most recently this January by allowing certified pharmacies to provide them, on prescription.

Anti-abortion activists want to see them banned. In perhaps the highest-stakes abortion case since the overturning of *Roe*, a federal district judge in Amarillo, Texas, on February 24th received final briefs for a claim that mifepristone—half of the two-drug regime used in medicated abortions—should be taken off the shelves across America. The lawsuit, against the FDA, was filed in a district with a particularly conservative judge. The Alliance Defending Freedom (ADF), representing pro-life groups, claims that the agency's approval of the drug, 22 years ago, was flawed and "jeopardised the health and safety of women and girls". The FDA points to decades of experience and studies that demonstrate mifepristone's safety.

The judge, Matthew Kacsmaryk, could issue a preliminary injunction to take the drugs off the shelves while the case proceeds. The plaintiffs requested this, says Erik Baptist, from the ADF, "because every day these drugs are in the marketplace, women are being irreparably harmed". In a brief against the injunction, 22 Democratic attorneys-general warned this would be "nothing short of catastrophic, causing shock waves nationwide". Legal scholars disagree over whether such an injunction would indeed lead to the immediate withdrawal of "mife". But if it did it would profoundly affect abortion, and the treatment of miscarriages, across America.

Thirteen hundred miles from Amarillo, pro-choice advocates are arguing for the opposite outcome. In West Virginia, GenBioPro, a maker of generic mifepristone, is suing the state for banning abortions, as this in effect bans its drugs. The firm

THE BURDEN IS UNDUE

Pro-mife, up against pro-life

claims that federal law protects access to medication approved and regulated by the FDA, which should take precedence over a state abortion ban. The Supreme Court removed a federal privacy right to abortion but it did not end other federal rights says Skye Perryman, from Democracy Forward, representing the manufacturer.

The ripple effects of both rulings could be big. If GenBioPro gets its way, this could set a precedent for those fighting bans in other states. If the plaintiffs in Amarillo win, the two-drug protocol that accounts for 54% of abortions in America could well become unavailable. Both cases may well make their way to the Supreme Court. To complicate matters further, on February 23rd a dozen Democratic state attorneys-general filed their own lawsuit against the FDA, asking it to lift excessive restrictions on mifepristone, which they argue is safer than Tylenol (paracetamol).

The American College of Obstetricians and Gynecologists has said the claims against the FDA in Amarillo are spurious. But predicting the outcome is less about science—or even law—than it is about politics. Abortion providers are preparing for the worst. Several say that, without mifepristone, they expect an increase in surgical abortions. Danika Severino Wynn, from Planned Parenthood, worries that some women will end up carrying unwanted pregnancies to term.

Many are also preparing to adapt their protocols for medical abortion, moving from the two-pill to a one-pill regime. Normally mifepristone is taken first, to end the pregnancy and detach the fertilised egg from the uterine wall, then misoprostol helps empty the womb by causing contractions. Removing the first step reduces efficacy only a bit, but it means abortions can become more painful and take longer. "What's baffling about this lawsuit is that it claims to want to improve safety, but moving to one pill would, if anything, increase doctor intervention," says Abigail Aiken, from the University of Texas at Austin.

Activists have been frustrated with the silence from those with broader interest in the Amarillo case, particularly big pharmaceutical companies. If the primacy of the FDA is challenged, they argue, other drugs could be next. And that is not all. "If you start chipping away at the idea that federal law supersedes state law," says Elizabeth Nash, from Guttmacher, a pro-choice think-tank, consequences could appear "about something totally different, perhaps on education policy, or civil rights".

Americans' views on abortion, meanwhile, are shifting. Some 64% say it should be legal in most or all cases, up from 55% in 2010, according to a poll last week by Public Religion Research Institute. And more than half believe Congress should pass a law preserving the right to abortion. ■

Witchcraft

Damned Yankees

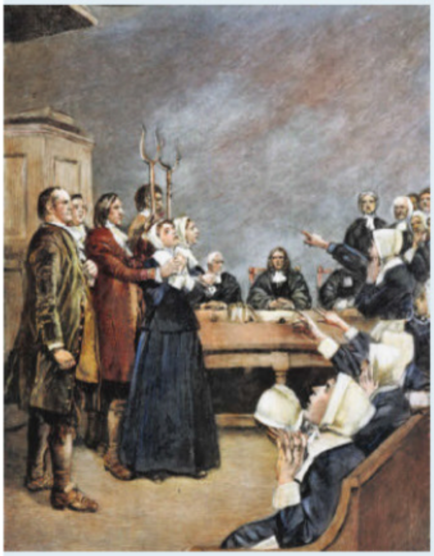
HARTFORD, CONNECTICUT

Why Connecticut is exonerating witches

IN 1642 COLONIAL Connecticut adopted a list of 12 capital crimes, which included murder, kidnapping, treason—and witchcraft. Five years later Alse Young was the first person recorded in colonial America to be executed for the crime of witchcraft. On May 26th 1647 she was hanged on the grounds of the Hartford meeting house, now the site of Old State House. Ten other people were executed for witchcraft in Connecticut and more than 30 people were indicted for it between 1647 and 1697. More than 375 years after Young was executed, her absolution may be nigh.

Last month a judiciary committee of the state legislature agreed to consider a resolution that would exonerate those accused of witchcraft in Connecticut. At a hearing on March 1st William Schloat, a nine-year-old, testified that he wished he had a time machine so he could help the accused. John Kissel, a Republican state senator, wondered about the state's role in any exoneration, since the trials took place before the United States existed, when Connecticut was a colony: "Once you go down that path, where does it end?" Luther Weeks, a descendant of a deacon who may have been involved in the prosecutions, countered that the state had no issue celebrating the positive aspects of colonial history; it needed to acknowledge the dark side, too.

Many accused of witchcraft were vulnerable. Unmarried pregnant woman were frequent targets. Young, a new arrival, may have been targeted because some thought she caused an outbreak of influenza. Beth Caruso, co-founder of the Connecticut Witch Trial Exoneration Project, made up of amateur historians and descendants, says her husband's ancestor was found guilty of bewitching a gun that had accidentally killed someone three years earlier, even though she was not there. Some may have been coerced into confessing. Many met their end at the gallows. Others faced the ducking test: suspected witches were dropped into water; the innocent sank and the guilty floated.



No blush about her name

Sarah Jack, co-host of "Thou Shalt Not Suffer", a witch-trial podcast, discovered three years ago that she was a descendant of Winifred Benham, the last person accused of witchcraft in Connecticut. "I was confused," she says. "I had no idea there were more witch trials in New England outside of Salem." Schoolchildren learn about the witch trials that took place in neighbouring Massachusetts. Arthur Miller, a playwright, used the trials of 1692 as an allegory of the anti-Communist panic. Salem, the heart of the hysteria, has embraced its history and become a kitschy, witchy tourist spot, with plenty of wands for sale.

Massachusetts has made several efforts to atone. In 1702 the General Court of Massachusetts declared the trials unlawful. A decade later the state overturned the convictions. In 1957 and 2001 more alleged witches were exonerated. Thanks to the efforts of children working on a history project, the last accused witch in Massachusetts was cleared of wrongdoing last summer. Also last year Nicola Sturgeon, then Scotland's first minister, issued a posthumous apology to the thousands of people persecuted as witches in Scotland.

But in Connecticut efforts have been successful only on the local level. The town council in Windsor, where Young lived, exonerated her in 2017. Proponents of the bill hope a history trail remembering those accused would be meaningful. Some say lawmakers have more pressing matters to deal with than exonerating those dead for nearly four centuries. Jane Garibay, who introduced the bill in the state's House of Representatives, says exoneration has been a long time coming, and that any injustice is worth putting right. "It was a wrong," she says. The bill is "saying we're sorry".

Lexington | Climate change

More than they have in generations, Democrats have a chance to prove their faith in government

GREEN INVESTMENT

Back when he was chief of staff to President Bill Clinton, John Podesta kept a photograph on his wall of the president reaching out to pat an enormous white tiger, backstage after a performance by Siegfried & Roy, a pair of Las Vegas magicians. The photograph seemed to serve Mr Podesta's idiosyncratic blend of fierce, almost monkish drive and wacky sense of humour. He kept it around to remind himself of what he called his biggest mistake: letting the leader of the free world cuddle a man-eating beast.

Mr Clinton is remembered for a certain appetite for risk in private life—he just had to pat the damn tiger—but for cautious, split-the-difference policymaking. Yet he wanted to be bold in the manner of Franklin Delano Roosevelt. Mr Clinton wound up sacrificing his plans to use government programmes to create millions of middle-class jobs on the altar of deficit reduction. "I hope you're all aware we're all Eisenhower Republicans," he fumed to Mr Podesta and other staff in 1993, according to "The Agenda", a book by Bob Woodward. "We're Eisenhower Republicans here, and we're fighting the Reagan Republicans. We stand for lower deficits and free trade and the bond market. Isn't that great?"

The next Democratic president, who was the next Mr Podesta would serve, found himself in the same straitjacket. Barack Obama got his health-care plan, but he probably never fulfilled his promise to create 5m "green jobs" to bolster the middle class. Yet no one can be sure, because not only did that programme succumb to budget cuts—so did the programme to count such jobs.

Now Mr Podesta is serving a third Democratic president. But this time he is not shrinking the president's ambitions, and his own, to fit a straitened consensus about government's role. Instead, Mr Podesta is out to transform America's energy economy by implementing the Inflation Reduction Act, which he calls "the largest climate and clean-energy bill passed in the history of the United States—and, I think it's fair to say, probably the largest ever passed in the history of the world." The legislation commits $369bn to investment in incentives and grants over ten years, more than twice the $150bn Mr Obama hoped to spend but was not able to. It comes on top of two other giant interventions in the economy, the laws to rebuild infrastructure and to support the semiconductor industry.

"I think the world has changed," Mr. Podesta says, simply, when asked whether an ideological change in the party, or a change in the political context, has freed Joe Biden to intervene so mightily in the economy. Both parties failed to pay enough attention to industrial strategy, he says, leaving America too dependent on supply chains running through China and other authoritarian states. Facing up to the climate crisis had become inescapable. And Americans "had grown sceptical about the fact that the government had an economic strategy that was about them". Mr Biden, he says, was able to braid these strands together. It is surprising that of the three presidents, Mr Biden, an instinctive centrist and legislative dealmaker, would get the chance to reach for Roosevelt's mantle. But, then, he has always been an artist of the possible. "Who he is, and what he thinks, and what his experiences have been, met the moment," Mr Podesta says.

At 74 Mr Podesta is one of the Democrats' most expert policymakers and scarred political warriors. His roots reach below today's bicoastal, elitist Democratic Party to its populist springs: he grew up in Chicago, son of a factory worker who finished one year of high school. He became a lawyer and worked on Capitol Hill for years. He founded and ran the Centre for American Progress (CAP), a liberal think-tank, before returning to government under Mr Obama. He ran Hillary Clinton's failed campaign in 2016, then returned to the CAP before Mr Biden brought him back once again. He calls himself "a bad boxer who's just too dumb to fall down".

Republicans view Mr Podesta as a ruthless partisan and the climate spending as a fat target for investigation. That is a playbook Mr Podesta knows, and it seems far down his list of worries. Nor is he much concerned Republicans will legislate to undermine the climate law itself. New projects are already under way, as the renewable-energy industry begins investing against the legislation's ten-year horizon. Marjorie Taylor Greene, a fire-breathing Republican representative from Georgia, may have called global warming healthy for the planet, but she has celebrated the new jobs coming to a solar plant in her district. "This is going to get rooted and be very hard to uproot," Mr Podesta predicts.

The tiger by the tail

He seems far more worried by how such projects will find workers at a time when the American construction industry says hundreds of thousands of jobs are already going unfilled. The law provides a bonus to companies that use certified apprentices, which may prompt businesses to work with unions to train women and minorities who might not otherwise have a shot at the new jobs.

Another headache for Mr Podesta was the failure of a bill to streamline the process for getting permits for clean energy. That has left state and local governments with tremendous blocking authority. Thousands of projects are awaiting permission to plug into America's dozens of electricity networks, which are not robust enough to accommodate all the new sources of power. In his first week on the job, Mr Podesta sat down with the secretary of energy, Jennifer Granholm, and reviewed each major project to identify bottlenecks. At the White House and within the cabinet, Mr Biden's top officials are committed to hitting deadlines project by project. "That has not traditionally been a political priority," he says. "There's nothing that beats management."

Generations of Democrats have longed for the chance Mr Biden has seized, to prove government can be a potent force for good in the lives of all Americans. From atop a neglected if not abused bureaucracy, he may have about two years to get that job done. ■

Brazil

Power breaker

SÃO PAULO

Luiz Inácio Lula da Silva may soon face another threat: his predecessor

SINCE TAKING office in January, Luiz Inácio Lula da Silva, Brazil's new left-wing president, has faced several problems. A week after his inauguration thousands of fans of Jair Bolsonaro, his right-wing predecessor, stormed the presidential palace, Congress and the Supreme Court, demanding that the army overturn last year's election result. Lula, as he is known, has picked fights with the central bank over raising interest rates. A recent, testy press conference with Olaf Scholz, Germany's chancellor, confirmed his indulgent attitude towards Russia's invasion of Ukraine. Now Lula faces another challenge: Mr Bolsonaro has said he will return from his self-imposed exile in Florida in March to be "the national leader of the right".

At first glance, Lula does not have much to worry about. Mr Bolsonaro's influence seems to be fading. Nearly 76% of Brazilians polled opposed the invasion of government buildings in January. Prominent *bolsonaristas* have distanced themselves from the former president, too. Legal troubles may have prolonged Mr Bolsonaro's stay abroad. He is subject to around a dozen investigations in Brazil on charges ranging from peddling falsehoods ahead of the presidential election to inciting the protests in January (all of which he denies). If he returns to Brazil, he will have to deal with these potential cases, and could be barred from holding office.

Dig deeper, however, and it is clear that Mr Bolsonaro remains surprisingly popular. He rode to power in 2018 on a wave of discontent with established parties following revelations regarding Lava Jato, a huge corruption scandal which occurred under the rule of Lula's Workers' Party. The right-winger plugged into the country's growing evangelical Christian base and won the support of the young, the security establishment, agribusinesses and small farmers and miners. All these groups still broadly support the former president.

Most strikingly, *bolsonarismo* retains its appeal among young Brazilians. In a recent poll, 57% of 16- to 24-year-olds said they would elect Mr Bolsonaro if elections were held the following Sunday, the highest share of any age group. In another poll, nearly 40% of Brazilians said they did not believe Lula had actually won the presidential election. The group that believed this most strongly were those aged 25 to 34. Mr Bolsonaro, with 65m followers on various platforms, is far more social-media savvy than Lula, who has 31m followers. Social media carry heft in Brazilian politics: the deputy who won the most votes in last year's election was Nikolas Ferreira, a 26-year-old *bolsonarista* who rose to fame on TikTok, a video-streaming app.

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38 AMLO takes on the electoral body

The armed forces and police remain fond of Mr Bolsonaro, a former army captain. Under him army pensions were exempted from a pensions overhaul that has delayed or reduced payouts for most Brazilians. The number of current and former military officers in federal government jobs more than doubled, to over 6,000.

Anderson Torres, the security chief of Brasília, the capital, and an ally of Mr Bolsonaro, flew to Florida two days before the January protests. Police later found a draft decree in his house, dated from his time as justice minister, that would have allowed Mr Bolsonaro's administration to overturn the results of the presidential election. Some policemen stood by during the insurrection. In response to the riot, Lula sacked dozens of military officials and police officers from government and dismissed the head of the armed forces.

Mr Bolsonaro can also continue to count on support from "the Wild West of capital", says Rodrigo Nunes of the Catholic University of Rio de Janeiro. That includes small- and medium-sized cattle ranchers who expanded their territory through illegal logging. Similarly, illegal gold-miners pushed deeper into the Amazon under Mr Bolsonaro, and are likely to be piqued by Lula's attempts to rein them in (see International section).

Agribusinesses are also an important part of Brazilian politics: the agribusiness lobby has links to around half of legislators in Congress, up from a fifth in 2010. Many in the sector are wary of Lula, despite the fact that relations with China were cemented under his first two administrations, between 2003 and 2010, which led to a farming boom. Brazil is now the world's biggest exporter of soyabeans, 70% of which go to China. Under Mr Bolsonaro, diplomatic ties with China were frostier. But some agribusinesses sided with the former president, nevertheless. He rode horses at rodeos, called campaigners who demanded agrarian reform "terrorists" and expanded subsidised government loans for farmers. Investigators are looking into whether people linked to agribusiness helped supply lorries, tractors and food to the insurrectionists in January.

Lula's response to *bolsonarismo* will partly determine whether or not it remains a formidable force. So far, his rhetoric and policies are working against him. The president rashly called the protesters in January "Nazis". And in his first week in office he created two departments that have worried both opposition politicians and free-speech advocates. One could file lawsuits to "fight disinformation" over public policies. The broad mandate has stoked fears about the implications for free speech. The other is meant to strike agreements with social-media platforms to regulate fake news online. Alongside this Alexandre de Moraes, a Supreme Court judge, has banned dozens of accounts of those he deems a threat to democracy. Mr Bolsonaro's supporters decry this as censorship.

The economy will not help Lula, either. The post-covid recovery gave Brazil a boost in 2021. Russia's invasion of Ukraine propped up prices of commodity exports last year. But inflation remains high and commodity prices are set to soften this year. In December Lula shepherded a constitutional amendment through Congress to exempt some spending from a cap on annual budget growth. This will increase the budget deficit.

On February 27th Fernando Haddad, the finance minister, said he would reimpose fuel taxes, which Mr Bolsonaro lifted ahead of the election last year. The chief of the Workers' Party criticised Mr Haddad for raising prices at a time of high inflation. Such squabbles within his party may make it harder for Lula to govern.

So might Congress, which has swung to the right. Lula won the election with only a 1.8-percentage-point margin, the tightest result since Brazil's return to democracy in 1985. Mr Bolsonaro's Liberal Party won 66 more seats last year than in 2018, making it the biggest in the lower house. Candidates aligned with Mr Bolsonaro also won 13 of 27 seats up for grabs in the Senate. Overall, Mr Bolsonaro's allies now control about a third of both of the two chambers. The country's three most populous and richest states are ruled by governors aligned with Mr Bolsonaro.

Lula's best hope is that Mr Bolsonaro's legal troubles could bar him from running for office. But even if this happens, right-wing candidates to replace the former president are already circling. "Jair is extremely popular, but this is not a matter of personality any more," says Luiz Philippe de Orléans e Bragança, a *bolsonarista* congressman. If the leftist government begins to stutter, the people "will look to us for solutions," he thinks. That may happen much sooner than Lula would like. ■

Mexico

Shaky democracy

MEXICO CITY

Huge protests have rattled Andrés Manuel López Obrador

THE POPULARITY of President Andrés Manuel López Obrador is remarkably sticky. His approval rating rarely falls below 60%. While voters express discontent with the state of the economy and security, they tend not to blame the person in charge. His attacks on Mexico's electoral agency could change that.

The INE, as the electoral body is now known, was created in 1990 after six decades of rule by the Institutional Revolutionary Party. It is crucial to free and fair elections in Mexico, which became a true democracy only in 2000. The INE organises ballots, counts votes, keeps an eye on politicians to ensure they obey electoral law and issues ID cards for voters. But Mr López Obrador has long held a grudge against the INE. In the presidential election of 2006 he lost by a 0.6-percentage-point margin to Felipe Calderón and claimed, without evidence, that the body had rigged the vote.

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An unholy row

Now a package of laws, which was approved by the Senate on February 22nd, weakens the INE. It gets rid of its local offices and slashes its budget, which involves firing 85% of its 2,500 staff. It also restricts the powers of the INE to monitor electoral law. Candidates may face watered-down sanctions for breaches of funding rules.

In response, on February 26th hundreds of thousands of protesters took to the streets in Mexico City and at least 85 towns across the country. Many wore bright pink, the colour of the INE, and carried banners declaiming "Don't touch my vote". One of the president's allies dismissed the protesters as right-wingers who want "to return to a corrupt past". Mr López Obrador suggested that some had links to drug gangs, and questioned how big the protests really were.

Opposition to the reforms may be far more widespread than the president and his allies think. No other issue has brought people to the streets in such numbers. A poll by the INE itself found a majority of Mexicans favoured reforms. But surveys also show that the INE is the second-most trusted institution in Mexico, after the armed forces. Some 80% of those asked by *Reforma*, a liberal paper, in November said they believed the INE was important to Mexico's democracy. Over half were satisfied with the INE in its current form.

The Supreme Court may strike down parts of the reform package as unconstitutional. Even so, Mr López Obrador's rhetoric is damaging. Next year Mexicans will go to the polls. Mr López Obrador is barred from running again, though his party is predicted to triumph. Whoever wins will oversee a country with flimsier democratic foundations.

Mining in Africa

Situation critical

CAPE TOWN

America wants to reduce China's influence over Africa's mineral resources

MINING INDABA, Africa's largest mining conference, is an anthropologist's dream. There are the corporate chief executives: alpha males keen to cut big deals for big rocks. There are the engineers staffing stands in bright corporate attire, resembling darts teams on tour, and the colourful African delegations: Ghanaians draped in kente cloth or Congolese dandies with watches the size of clocks. They are offset by Chinese officials in dark suits and Saudis in white thawbs.

This year's event, which took place in Cape Town in February, attracted America's largest delegation ever, including officials from the White House and departments of state, commerce and energy. Its size reflects America's hunger for the 50 "critical minerals" it deems essential to reduce carbon emissions and create green jobs in the process. Though America's search is global, Africa, home to around 30% of the world's mineral resources, is a crucial part of the hunt. And by pledging to do mining differently—both from how China does it now and how the West has in the past—America says it will help transform African economies. "The energy transition is an opportunity for an Africa transition," says Amos Hochstein, Joe Biden's envoy for all things concerning energy security.

American officials see Africa as helping to solve two problems. The first is a global shortfall in the minerals that will be needed if the world is to meet its climate goals. The International Energy Agency, an official forecaster, reckons that makers of clean-energy technologies will need 40 times more lithium, 25 times more graphite and about 20 times more nickel and cobalt by 2040 than in 2020. Demand for rare-earth elements—metals in the esoteric parts of the periodic table used in everything from wind-turbine magnets to fighter jets—may be seven times higher by the end of the next decade.

The second problem, at least for the West, is China's outsized influence on supply chains. China refines 68% of the world's nickel, 40% of copper, 59% of lithium and 73% of cobalt, according to a report in July by the Brookings Institution, an American think-tank. "China has had free rein for 15 years while the rest of the world was sleeping," says Brian Menell, chief executive of TechMet, a minerals firm. Though China is less dominant in mining, where its firms compete with multinational majors, Western governments are concerned that, without additional supply, firms will struggle to feed new downstream processing facilities that officials are keen to see built in friendly countries.

America views cobalt, which is used in batteries, as a cautionary tale. In Congo, the source of about 70% of global production, Chinese entities owned or had stakes in 15 of 19 cobalt-producing mines as of 2020. America's decision to allow a US firm to sell one of Congo's largest copper-cobalt mines to a Chinese one in 2020 is seen in Washington as an enormous act of stupidity. It is little comfort that battery-makers ▸▸

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are trying to use less cobalt, in part because of concerns about operating in Congo. "We cannot allow China to become an OPEC of one in critical minerals," says an American official, referring to the oil cartel.

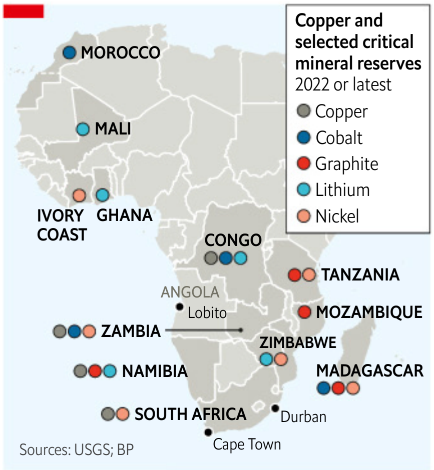
It is possible to identify three strands in America's approach. The first is a multilateral effort involving Western allies. In June Antony Blinken, America's secretary of state, launched the Minerals Security Partnership, whose 13 members include all the G7 countries and the EU. Many of these countries are also looking to secure more scarce rocks. Britain launched a "critical minerals strategy" in July 2022 and later this month the European Commission will propose a Critical Raw Materials Act.

The American-led partnership is a work in progress. But the idea seems to be that member countries will support their own firms, which propose mining projects that will meet high environmental, social and governance (ESG) standards. This support might include lobbying by diplomats in the country where the mine will be built, finance for the project, or help in attracting private investment to it. The partnership is not restricted to projects in Africa, but representatives from Congo, Mozambique, Namibia, Tanzania and Zambia attended a meeting to discuss it in New York last year. Convening the session, Mr Blinken highlighted a graphite mine in Mozambique, whose owner has received a loan from the American government, that ostensibly reduces the risk of conflict in the area by providing jobs to locals. Its output will be sent for processing in Louisiana.

A second strand in America's approach involves its development agencies "de-risking" projects as they have done in, say, agriculture or the power sector. As well as the US Export-Import Bank, which offers trade-financing, there is the International Development Finance Corporation (DFC). In 2018 the Trump administration doubled the DFC's (or rather, its predecessor's) lending cap to $60bn and changed the rules so it can take equity stakes in firms, too. Though DFC only has one direct investment in mining at present (Mr Menell's TechMet), it is keen to add more.

The third element is more active diplomacy in Africa. Since Mr Biden hosted more than 40 African leaders in Washington in December, several senior officials including Janet Yellen, the treasury secretary, have visited the continent. Mr Biden is expected to visit this year. America has more interests in Africa than just minerals. But it was notable that Mr Hochstein, who spent much of 2022 managing the fallout from Russia's invasion of Ukraine on oil and gas markets, attended Indaba.

An early diplomatic success is the Lobito corridor. The idea of revamping the railway that could take copper from Congo and Zambia to Angola's Lobito port has been mooted for decades. It would be a much quicker route than the typical journey by road to the South African port of Durban. But progress stalled until the accession of new presidents in the three relevant African countries (João Lourenço in Angola in 2017, Félix Tshisekedi in Congo in 2019 and Hakainde Hichilema in Zambia in 2021). The trio have better relations than some of their predecessors with America and with each other—and are less China-leaning. Last year a Western-led consortium beat Chinese firms to the contract to rebuild the railway. American diplomats hope it will make investment in the three countries more attractive and create a new route to processing plants outside China.


Copper and selected critical mineral reserves
2022 or latest

Sources: USGS; BP

Another potential success is a memorandum of understanding signed by America, Congo and Zambia in January. America says it will help Africa's two largest copper exporters do more than just sell the metal in its elemental state. Under it, America agreed to help the two African countries build supply chains to process their raw minerals into battery precursors for electric vehicles.

African politicians are giving the American push a cautious welcome. Situmbeko Musokotwane, Zambia's finance minister, says he knows that Western countries cannot boss their own firms about. But "they can still be helpful by talking down the perceived risks of Africa."

Small mining firms are responding to the West's signals. An Australia-based executive who has sold mines to Chinese firms says he is now exploring projects in countries which are on good terms with America, such as Namibia and Zambia. "In five years the West will be really desperate. And we want to be ready," he says.

Other small miners hope that the West's hunger for ESG-friendly mineral projects will make them more attractive investment propositions. Many cite the example of Lifezone Metals, a firm set to list in New York, that plans to extract nickel from a planned mine in Tanzania using a technique that is much less carbon-intensive than the usual method of smelting it. Last year it won the backing of BHP Group—the first significant investment in Africa by the world's biggest miner in several years. The Tanzanian government, for its part, sees the nickel project as the start of more processing of raw materials in the country.

It is unclear, though, whether the West's geostrategic ambitions will translate into a massive increase in investment. Capital expenditure by 20 large miners is forecast to rise by about 12% in 2023, according to Mining Technology, an industry tracker. This is below analysts' estimates of what is required for the world to meet climate goals. Duncan Wanblad, the CEO of Anglo American, says that there are too few bankable projects in development. "I can't get the maths right," he sighs. Over the past 20 years "the only big capital deployment has been the Chinese ecosystem," argues Benedikt Sobotka, the CEO of Eurasian Resources Group. Part of the problem remains perception, argues a consultant to the mining industry. When American investors "think of mining in Africa, they still think of cobalt, Congo and child labour".

Prospecting for balderdash

"The American intention is real," adds another executive, "but they don't know what they're doing." African priorities are often not American priorities. "My worry is that half the American delegation believes their own bullshit," says another CEO, adding: "It is not enough just to be America."

Sameh Shenouda, the executive director of the Africa Finance Corporation, a pan-African fund based in Nigeria, welcomes renewed Western interest in African mining, but he has two worries. The first is that projects will take too long to get started because of American bureaucracy. The second is that America's push to ally ESG-friendly investing with mining would not endure under a Republican president.

American officials sometimes come across as patronising when they warn Africans against doing deals with China. "The Americans are completely clueless about what goes on in our politics," says a former adviser to an African president. China's success in Africa, he posits, is because their firms can get projects done in time for the next election.

Many African governments would like more American involvement in the continent but are in no rush to ditch China. "Zambia takes countries case by case", says Paul Kabuswe, Zambia's minister of mines. "We're not going to say that this country is not working with us." One reason may be that greater competition could allow African governments to strike better deals. After all, says Mr Kabuswe: "Zambia has been mining for decades and has very little to show for it." ■

Nigeria's election

A change of the old guard

LAGOS

Bola Tinubu wins a flawed presidential election in Nigeria

After a chaotically organised vote and messy count, Bola Tinubu, the candidate of Nigeria's incumbent ruling party, has been declared the winner of the closest presidential election in decades. Mr Tinubu, a 70-year-old former governor of Lagos and longtime kingmaker in Nigerian politics, took 37% of the vote, the electoral commission said on March 1st. This placed him ahead of Atiku Abubakar (29%), a tycoon standing for the People's Democratic Party (PDP), the main opposition, and Peter Obi (25%), a wildcard third-party candidate representing the Labour Party.

Mr Tinubu's victory confounded most pollsters, who had put Mr Obi well ahead in the race to lead Africa's biggest economy and most populous country. (Though some pundits questioned the predictive power of several polls because large numbers of respondents had declined to say whom they would vote for.) It also extends the rule of the All Progressives Congress (APC) party, which has been in power since 2015. During this time Nigerians on average have grown poorer, while violence, separatism and insecurity have risen. The election result rattled financial markets—Nigeria's international bonds fell—over concerns that the opposition parties' claims of vote-rigging could cause instability.

This election was expected to be Nigeria's cleanest and most transparent ever, thanks to the use of new technology by the Independent National Electoral Commission. Its systems were meant to definitively identify voters and transmit photos of the results directly from 176,846 voting stations to a central collection point, where the public could see and verify them.

The idea was to improve trust in the democratic process. Many Nigerians have vivid memories of the presidential election in 2011, when perhaps 800 people were killed in clashes after the losing party cried foul. Yet numerous failures by the electoral commission have once again opened the door to allegations of rigging and malpractice. Opposition parties are calling for a re-run. There are worries that violence may ensue and the results will almost certainly be dragged through the courts.

There were problems right from the start. An hour after voting began on February 25th one-third of polling stations were still not open, according to monitors from the Centre for Democracy and Development, an NGO based in Abuja, the capital. At some stations officials had inadequate materials. Some polling units were attacked by armed men in battleground states like Lagos, Kano and Rivers. There were also reports of voter intimidation, vote-buying, the snatching of ballot boxes and the burning of ballot papers. All of this undoubtedly reduced turnout. Only a quarter of registered voters cast their ballots, a lower share than the 35% turnout in the previous election in 2019.

Photo finish

The counting was also haphazard. The system for transmitting results suffered widespread failures. At the time of publishing this article not all of the results had been uploaded. Many of them were illegible and incorrectly labelled. Some agents accidentally sent in selfies instead of the tally sheets they were meant to.

Unhappy voters flooded social media with photos of results announced at their polling stations, attempting to show discrepancies with those announced at higher levels. Party officials also shared pictures of handwritten forms that appeared to be scribbled over and rewritten. At a Lagos collation centre one Labour Party official complained that her colleague signed the results at gunpoint. In Rivers state the electoral officer paused the count after receiving death threats.

The parties backing Mr Abubakar and Mr Obi have called for a re-run and the resignation of the head of the electoral commission, Mahmood Yakubu. "The next government is going to be built on outright illegality," said Datti Baba-Ahmed, the Labour Party's vice-presidential candidate, at a press conference ahead of the final tally. Ifeanyi Okowa, the PDP's vice-presidential candidate, said Mr Yakubu had "a moral obligation to save this nation" by stopping the count. Electoral officials said the process was "free, fair and credible". Mr Tinubu said the reported irregularities were "few in number and were immaterial to the final outcome". International observers said in a preliminary report that the election "fell well short of Nigerian citizens' legitimate and reasonable expectations".

As is often the case in Nigerian elections, the opposition will almost certainly seek redress from the courts. Evidence from social media and independent monitors could prove crucial to their case. There will probably be particular scrutiny of some close results in states where Mr Tinubu barely scraped over the threshold of 25% that any candidate needs to cross in at least two-thirds of Nigeria's 36 states and the federal capital to avoid a run-off. Mr Tinubu, who achieved this in 29 states (but not the capital) got just 25.01% in Adamawa state and 25.8% in Bayelsa state.

These close calls reflect a tight race—and a country that split three ways in the election, with each of the trio of main candidates taking the lead in 12 states. Such divides, along with the questions Mr Tinubu (pictured below) faces over the legitimacy of his victory, may hamper his ability to unite a country that is still fractured by religion, language and ethnicity.

Mr Tinubu's own reputation as a self-interested kingmaker does not help his cause. His campaign slogan, "*Emi lo kan*", is Yoruba for "It's my turn." After a brutal fight, it seems that in fact, it is. ■

The kingmaker certified as king

Palestine's West Bank

A tinderbox

HAWARA AND JERUSALEM

As violence with Israel escalates, a new type of Palestinian militia is emerging

EVEN BY THE violent standards of the Israeli-Palestinian conflict, the night of February 26th was unprecedented. Hundreds of Israeli settlers rampaged through Hawara, a Palestinian town of 7,000 south of Nablus in the West Bank. They were enraged by the shooting dead of two brothers in Hawara earlier that day. For hours they set fire to houses and cars. One Palestinian was killed by gunfire (whose is unclear). For the most part the Israeli army stood by and watched. "They did fire tear-gas at Palestinians who were trying to come and help," said one Palestinian, surveying the blackened front of his home.

The gunman, so far unidentified, who killed the settlers is thought to have links to Lions' Den, a new armed Palestinian group based in Nablus. It emerged in the aftermath of Israeli raids around the city last year, notably one in which Israeli forces killed Ibrahim Nabulsi, an 18-year-old who had led a then-unnamed group in a series of drive-by shootings at Israeli targets. Lions' Den has since claimed dozens of attacks in the West Bank, including the killing of an Israeli soldier in October. Support for it is growing. Posters of members killed by Israel plaster the market in Nablus. West Bank shops sell pendants adorned with Nabulsi's face. The group stands for a new kind of Palestinian militancy.

Unlike other militias, the group claims no link to any Palestinian party. It has emerged amid dissatisfaction with the Palestinian Authority (PA), which calls for non-violent resistance in the face of increasingly deadly Israeli raids, and infighting between Palestinian factions. The group resists the elaborate agendas of Hamas and Fatah, says Mazen Dunbuq, an ex-leader of the al-Aqsa Martyrs' Brigade, a nationalist radical group attached to Fatah. "Their only aim is to resist the occupation."

The Israelis and Palestinians are finding the group hard to handle because of its disparate and dynamic nature. There is no leadership to negotiate with; deals cut with some members may not work for others. "It's unlikely the Palestinian Authority will conduct any operations against them," argues Mr Dunbuq. "They are the voice of the Palestinian street and the voice of the people. You can't go against this stream."

Lions' Den is feeding off the leadership vacuum in the PA, says Tahani Mustafa, an analyst in the West Bank for the International Crisis Group, a Brussels-based think-tank. "Fatah has become so inclusive it stands for everything and nothing." Established groups with little local support have lost control, she says. But when Lions' Den calls for action, people respond.

New in town

Outsiders are increasingly worried by the rising violence. During the attacks in Hawara, Israeli and Palestinian security delegations were meeting in Jordan, together with American and Egyptian officials, to try to lower tension before Ramadan, which begins later this month.

Under pressure from Israel and America, the PA is trying to tame Lions' Den. It has offered it salaries in exchange for surrendering its weapons. Members wanted by Israel would be offered protective custody in Palestinian jails. A few have agreed. But others have continued to fight.

More Israeli raids on the group look inevitable. But this will stoke radical sentiment, argues Ms Mustafa, not dampen it. And the new government of Binyamin Netanyahu, which relies on far-right and ultrareligious voters, is adding fuel to the fire. Mr Netanyahu did not condemn the settlers' violence; he simply told them not to take the law into their own hands.

Besides, Mr Netanyahu's coalition includes those who openly side with the arsonists. A parliamentary member of Jewish Power, the party led by Itamar Ben-Gvir, the national-security minister, was on the scene at Hawara. Bezalel Smotrich, the finance minister, said the town should be "wiped out". The next day the party boycotted a session in the Knesset, Israel's parliament, instead going to an illegal settler outpost that the army was trying to evacuate, and called for tougher measures against the Palestinians. Mr Netanyahu must get serious, said one party member, "if he doesn't want to see more events like Hawara." If and how the prime minister will manage such threats is unclear. ■

Tunisia and immigration

Blame a conspiracy

DUBAI

The "Great Replacement" theory finds an unlikely proponent in north Africa

IT WAS RHETORIC that has become all too common among European populists. "Hordes" of African migrants were descending on the homeland, bringing with them "violence, crimes and unacceptable practices". Their arrival was a conspiracy to change the demography of a proud nation. Fear not, though. The president, who ran for office as an outsider determined to upend the political order, vowed urgent measures to secure his country's borders.

One thing made it different: this language came not from Marine Le Pen or Giorgia Meloni, but from Kais Saied, the president of Tunisia.

There was a grim irony to his comments at a meeting of the national-security council on February 21st. His citizens have long been on the receiving end of such rhetoric after crossing the Mediterranean to Europe—and his autocratic presidency has spurred more of them to attempt that journey. Yet as Tunisia's economy sputters and popular anger mounts, he has deployed the same language against the migrants in his own midst.

Mr Saied's election in 2019 was the product of years of political dysfunction. After Tunisians overthrew their longtime dictator, Zine el-Abidine Ben Ali, in 2011, the country was paralysed by squabbles between Islamist and secularist parties. Neither was particularly good at fixing the endemic problems—a weak economy, rampant corruption, deep inequality—that upset many citizens. That left 73% of voters willing to endorse Mr Saied, a little-known law professor with a robotic demeanour and only the vaguest campaign platform.

He has spent much of his presidency dismantling a young democracy. In 2021 he suspended large parts of the constitution and sent tanks to bar the doors of parliament. A new constitution, rushed through last year in a desultory referendum, ensured that he could govern as a strong president unhindered by checks and balances from the legislature.

Over the past few weeks police have rounded up an ever-growing list of critics. Leaders of both Islamist and secularist parties were dragged from their homes. So were the director of a popular radio station, a prominent lawyer, and the head of a football club. Criticism of the president is now, in effect, a criminal offence.

There is much to criticise, since Mr Saied has done little to fix a sinking econ-

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CSC:Miami

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omy. Annual inflation topped 10% in January. Unemployment is 15%. One-third of university graduates and a higher share of young people cannot find work. The currency has lost 55% of its value since 2011. Buried under a mountain of gross public debt worth 89% of GDP, Tunisia struggles to pay for imports; there have been shortages of sugar, pasta and other staples. Bailout talks with the IMF are deadlocked.

Tunisians are desperate to escape their stagnant, authoritarian country. A survey conducted last year by a pro-business think-tank found that 71% of public-university graduates want to emigrate. Educated or rich Tunisians board planes to the West, the Gulf or, in another stroke of irony, sub-Saharan Africa. Poor Tunisians try their luck on the Mediterranean. More than 2,600 reached Italy by boat in 2019, the year that Mr Saied took office. In 2022 more than 18,000 people braved the dangerous crossing from Tunisia.

Playing the blame game

Those who remain are losing faith in Mr Saied, whose popularity has plunged. He blames a litany of scapegoats for Tunisia's ills: corrupt politicians, price speculators, foreign embassies. Now he has added black migrants to the list in comments so bilious they even won praise from Eric Zemmour, the anti-immigrant radical who ran in last year's French presidential election. "The Maghreb countries themselves are beginning to sound the alarm in the face of the migratory surge," he tweeted.

Proximity to Europe has indeed made Tunisia a way-station for migrants bound for it from countries like Ivory Coast. But their numbers are small. The Tunisian Forum for Economic and Social Rights estimates there are just 21,000 illegal migrants from sub-Saharan Africa in a country of 12m. Many do manual labour during their stays in Tunisia. Abuse and wage theft are common. If this is a plot to change Tunisia's demography, it is a poor one.

Some Tunisians were outraged by Mr Saied's remarks. Hundreds joined a protest on February 25th. Nabil Ammar, the foreign minister, had to issue a quasi-apology, saying the government would protect all migrants in Tunisia. But Mr Saied's words also found a receptive audience. Human-rights groups say dozens of black migrants were assaulted or robbed after his remarks. A Nigerian student group warned its members not to take the metro or linger in popular neighbourhoods of the capital.

Racism is a useful tool for demagogues everywhere. But Mr Saied is running out of people to blame. There are growing fears that Tunisia will default without an IMF deal. That would further sink its economy—and would send even more of his citizens on boats to attempt their own desperate journey. ■

Traffic jams in Iraq's capital

Going nowhere

BAGHDAD

As the shooting subsides, Iraqis are killing time in their cars

BOMBS, TERRORISM and civil war used to keep Iraqis indoors. Now it is the gridlocked traffic. Commuters waste hours a day stuck in exhaust fumes. Meetings are delayed for hours. In a data-poor region, few statistics are available. But some travellers reckon Baghdad is now the most congested city in the Middle East, a region where the streets of many a capital are routinely clogged. "Let's meet on Zoom," suggests one businesswoman, wearily.

Iraq once sported the region's most advanced transport system. In the 1950s it was the first in the Middle East to roll out double-decker buses. It took mere minutes to travel from the suburb of Mansour on the west side of the Tigris to Karrada on the east aboard the No 77. Express trains ran from Basra on the Gulf coast all the way to Istanbul. But despite current annual oil revenues of over $100bn, Baghdad's road network is all but unchanged since the 1980s. Wars, economic sanctions, corruption and neglect have gutted the transport system.

Meanwhile, Baghdad's population has risen three-fold since 1980, to more than 9m. Every day 2.7m cars pour into a city that was built for 200,000, say planners. In the absence of a ring road, the country's lorries heading from north to south snarl right through the city. The fumes are one of the reasons that the city's summer temperature last year hit a record 51.8 degrees Celsius. Many residents escape to their air-conditioned cars, making the pollution worse.

Officials who like to blame foreigners say Iraq's neighbours make matters worse. Millions of tax-free cars have entered through uncontrolled crossings. Many of Baghdad's taxis are made in Iran.

Ideas for solutions abound. Saddam Hussein, the old dictator, unveiled plans for an underground in 1983. A decade ago Iraq signed a multi-billion-dollar contract with Alstom, a French train company, to design an elevated railway to run above the city. Feasibility studies galore plot routes for flyovers, underpasses and dedicated bus lanes. But approval for these schemes is stuck in Iraq's log-jammed parliament. Rather than invest in capital projects, its many factions prefer emergency budgets, which let them disburse oil revenues to their followers as salaries.

The new prime minister, Muhammad Shia al-Sudani, does at least recognise the problem. Since taking office in October, he has removed some checkpoints and partially reopened the Green Zone—the city centre Iraq's rulers and foreign embassies had reserved for themselves since 2003—to Iraqis generally. Many of the concrete walls the Americans left behind in the area have come down. The traffic lights are operating once again. But they seem at odds with the traffic police, who like to natter while holding back ordinary Iraqis' cars so that Mr Sudani and his officials in their motorcades can swish pass.

I got a plan to get us outta here

Bangladesh

Trials of a development superstar

DHAKA

Under Sheikh Hasina, corrupt politics is a bigger risk to the country than poverty

SQUEEZED ON THREE sides by India and on the fourth by the Bay of Bengal, Bangladesh, the world's eighth-most populous country, is both a much-praised model of development and a significant regional economy. Since a brutal war of independence from Pakistan in 1971, it has made remarkable social and economic progress.

A billiard-table-flat land on the combined floodplain of some of Asia's biggest rivers, the country was once a byword for poverty, famine and natural disasters. Today, with a population of 170m, devastating human losses to cyclones are, thanks to shelters and warning systems, a thing of the past. So, too, are widespread food shortages. Child mortality rates are slightly better than the global average and half those of Pakistan. Female literacy, not long ago abysmal, is now 73%. The share of women in paid work has climbed from 4% at independence to 35%, largely thanks to a thriving garment industry.

In the decade before covid-19, Bangladesh grew at an average annual rate of 7%, only slightly slower than China. Its GDP per person, around $2,500 at market prices, is higher than India's. It is expected to graduate from the UN's ranks of least developed countries (LDCs) in late 2026. It aims be an upper-middle-income country by 2031.

Yet hard-won optimism about Bangladesh's trajectory is now being tested. The pandemic and Russia's invasion of Ukraine have caused a serious economic shock to the country. It is gripped by a cost-of-living crisis. One manifestation is that the streets of Dhaka, the teeming capital, have this winter been filled with huge numbers of rough sleepers wrapped in flimsy shawls. Another is that at the central bank, the country's foreign-currency reserves have been alarmingly run down.

On the political front, an election is due by the beginning of next year. Its outcome is not in serious doubt: Sheikh Hasina, the increasingly autocratic prime minister, has done what she can to destroy the opposition. Yet her zero-sum approach to politics has raised tensions that are likely to spark violence as the vote looms. Down but not quite eliminated, leaders of the opposition Bangladesh Nationalist Party (BNP) are already in the streets. Meanwhile, the stench of corruption in Dhaka is as acrid as the capital's polluted air. Far from stepping into a bright future, Bangladesh appears in key respects to have lost its way.

The energy and bustle of Bangladeshis are still on display in the malls and factories of Dhaka and beyond. Such dynamism is the engine of the country's unpredicted success. After the war, many of its people returned from abroad to help rebuild. One launched a charity, BRAC, which focused on women's and children's health, ran schools and set up microfinance schemes. NGOs performed wonders to boost gender equality, which in turn improved many social, health and economic outcomes. Some developing states, including India and Pakistan, view NGOs as political threats. Bangladesh's overstretched government embraced them. Now BRAC is an export success, running services in Asia, Africa and the Caribbean.

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Two-fifths of the population still work on the land. Yet road-building by the World Bank and others has connected villages with towns, boosting local farm markets. The garment industry that sprang up around Dhaka is world-class. The government helped by scrapping duties and outdated labour laws.

Sheikh Hasina, in power since 2009, has sought to drive a new phase of growth by splurging on infrastructure. Power has long been patchy. The capital has satanic levels of traffic congestion and air pollution. Crossing the riverine country is a challenge. But last year a huge road (and, soon, rail) bridge opened across the Padma River, the main channel in Bangladesh of the mighty Ganges, transforming the country's economic geography. In Dhaka, a Japan-backed elevated metro is going up, along with a new airport terminal. Everywhere, power plants are being built. Much of this construction is only worsening congestion in the short term. Longer-term, the bottlenecks should ease.

Despite such visible progress, foreign diplomats, independent analysts and even thoughtful members of the ruling Awami League (AL) in private express serious concerns. These run along several fronts, economic and political, though all are related. One is balance-of-payments vulnerabilities. Another is an overreliance on the garment industry. Overarching all is a grave worry about governance. A web of state capture and decay has spread through the country's institutions.

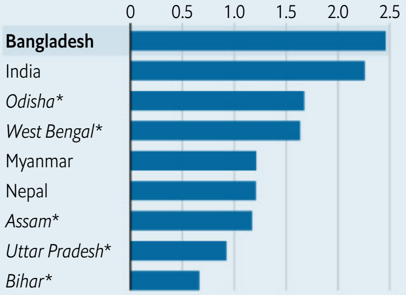
These weaknesses have been laid bare by a familiar set of woes, including the fuel- and food-price inflation and fleeing capital that the war in Ukraine has visited upon the developing world. Bangladesh's foreign-currency reserves have slumped to under $30bn. Last year the government called in the IMF as a precaution. In January a $4.7bn loan was agreed. Yet the local currency, the taka, remains wobbly. And as the government puts the brakes on imports, in part by doubling down on the requisite inspections and permits, exporters are finding it hard to bring in the foreign inputs they need. They are also struggling to get hard currency to back letters of credit. Without those, they cannot trade.

The garment industry poses a longer-term concern. Overreliance on it, says Fahmida Khatun of the Centre for Policy Dialogue, a think-tank in Dhaka, represents a "serious weakness". The sector's future is uncertain. Graduating from LDC status will mean losing some tariff exemptions in Western markets. Lower-cost producers, such as in Cambodia and Ethiopia, threaten to take the same bite out of Bangladesh's market share that it took from China's.

Other export industries struggle to grow. Bangladesh is a member of no major regional trade pact. It has attracted little of the other sorts of production being moved out of China. Though some domestic sectors such as pharmaceuticals and electronics have potential, appalling bureaucracy and uneven customs duties hold them back. The EIU, a sister company of *The Economist*, ranks Bangladesh's business environment 15th out of 17 Asian countries.

Best in the basket

GDP per person, 2021, $'000



Sources: World Bank; national statistics

*Indian state, year ending March 2022

That speaks to the country's biggest concern. Its dire governance touches nearly every corner of the country's affairs—even the external account. Bangladesh's rich and corrupt have made it a money-laundering world leader. Bangladeshis have a slang for those upscale districts of Toronto and other Western cities where their rich have parked money: *begum para*, or "begum ["high-ranking woman"] areas". If it were not for a remarkable, 10m-strong army of mainly poor Bangladeshis, toiling in the Gulf, South-East Asia and elsewhere and remitting money home, the country's balance of payments would be even worse.

Business and politics are conjoined. Non-performing loans have risen, thanks to banks favouring the politically connected with loans they do not repay. A powerful cabal of politicians, bureaucrats and the security services extorts fees that are the downpayment for accomplishing anything—from getting off an unfair traffic fine, to winning a government contract, to joining the coastguard, to applying to be a primary-school teacher. Far from being valued as they dearly deserve to be, those overseas-remittances workers are routinely shaken down at immigration.

CHINA
NEPAL
BHUTAN
Uttar Pradesh
Bihar
Brahmaputra
Assam
Ganges
Padma
Dhaka
INDIA
West Bengal
Kolkata
BANGLADESH
Odisha
MYANMAR
Bay of Bengal
250 km

Sheikh Hasina claims she is cracking down on corruption. In truth, the state is rotting from the head. She has constructed a personality cult around her late father, Sheikh Mujibur Rahman, the country's independence hero—and by extension around herself. Her patronage system and demand for loyalty underpin her power, while destroying independent institutions. The police and the courts are in the service of the AL and its cronies. The press is not free. Dissidents are in jail; some have been murdered. Even on punchy university campuses the AL rules by fear, via its swaggering, sometimes violent student wing. A first-year undergraduate says he had to toady to its leaders to get a dorm room. Bright young Bangladeshis say they yearn to move abroad.

Sheikh Mujibur tried to make Bangladesh a one-party state before, in 1975, he and much of his family were assassinated. His daughter has all but completed the task. This is the context for the coming election. Sheikh Hasina long ago dispensed with the practice of holding elections under an impartial caretaker government. That way, the AL can more easily control the results.

Sheikh's rattle and roll

With her arch-rival, Khaleda Zia, under house arrest and her party, the BNP, hounded, the election's outcome is already known. Yet the BNP, no less thuggish now than when it was in power, has recently recovered sufficiently to launch mass protests in Dhaka. It raises the risk of mob violence, and deepening political divisions.

It is only one of several worrying scenarios. Sheikh Hasina is 75 and has not anointed a successor. Younger family members lack either the experience or will to take over. If a stroke were to take the prime minister tomorrow, the country could fall into chaos.

Not all is gloom. Impressive to any visitor is how cheerfully and relentlessly young Bangladeshis look to themselves to solve problems. Theirs, says one Dhaka observer, is "a country of side-hustles". People run e-commerce businesses from their bedrooms. A journalist keeps a dozen buffaloes outside the capital and supplies mozzarella to upmarket pizzerias. Over dinner in such places, people speak of their hopes for a better, more representative Bangladesh, one that gives opportunities rather than takes them away. At the moment, though you say it in public at your peril, the main obstacle to that future is the apparatus of wasted opportunities presided over by their prime minister. ■

India and the G20

Global diplomacy à la Modi

DELHI

The 20-member club looks handier for India's prime minister than the world

Venture out into any big Indian city these days and you might think India's G20 presidency is the country's main preoccupation. Roundabouts, historic monuments and airports are plastered with posters displaying its logo, a green-and-saffron rendering of "G20". The "0" is represented by a globe cradled within a flowering lotus. It looks like the insignia of the ruling Bharatiya Janata Party (BJP). Images of Narendra Modi, India's prime minister, are in close attendance, gazing benignly down.

The advertising blitz reflects the Modi government's ambition for India's year-long turn at the wheel of the 20-member club—which started last week with a meeting of finance ministers in Bangalore. India wants to promote the G20, whose members account for 85% of the world's GDP, as a forum for solving big problems. As the self-styled "Voice of the Global South", it especially wants to stress the importance of powerful developing countries in that effort. Perhaps above all, it wants to use the G20 as a stage for Mr Modi to show off the strides India has made to visiting bigwigs and, with a general election due next year, also to Indian voters.

The official agenda for India's G20 presidency emphasises the demands of poor countries: for inclusive growth, climate finance, more "representative" multilateral institutions and progress on the UN's Sustainable Development Goals, which has been set back by the fallout from covid-19. "India will probably never get the permanent seat on the UN Security Council that it wants, so it's trying to work through other forums," says Mohan Kumar, a former Indian ambassador to France who leads research on the G20 at the Jindal School of International Affairs, near Delhi.

How realistic are these ambitions? In some ways, geopolitics is working in Mr Modi's favour. Western governments also want India to play a bigger global role. They view it as a potential bridge to the developing world, as Joe Biden implied last week by nominating Ajay Banga, an India-born American citizen and former CEO of Mastercard, to head the World Bank. They also see it as a democratic counterweight to China (notwithstanding the BJP's anti-democratic harassing of its domestic critics). On a visit to India last week, Olaf Scholz, Germany's chancellor, said he was "convinced that our countries are closely linked, that we have common views, especially when it has to do with democracy".

G20
भारत 2023 INDIA

The greatest show on Earth?

India's G20 presidency seems sure to win the country many more such plaudits. Yet it seems unlikely to inspire much progress towards its goals. An informal grouping with no charter and no secretariat, the G20 relies on consensus among its members to get things done. Formed in 1999 in the wake of the Asian financial crisis as a more inclusive forum to discuss economic co-operation than the G8 (now G7) of rich industrialised countries, it achieved its one standout success in April 2009, when its members, fearing an impending depression, agreed on measures to stabilise global financial markets. These days they are not comparably united on any issue.

Anyway, thanks for coming...

The club is divided by several geopolitical faultlines. America and some of its allies are embroiled in an economic and ideological conflict with China. They are also supplying Ukraine with money and weapons while slapping sanctions on Russia. Some poor and middle-income countries, including India, also worry about China. But when it comes to Ukraine, they, with India again to the fore, are mainly concerned about the damaging effect of Western sanctions on food and energy security and on their public finances.

There is little to suggest India will make a serious effort to bridge such gaps. Forging consensus requires horse-trading and compromise, neither of which is prominent in Indian foreign policy. It elevates the pursuit of narrow self-interest, issue by issue and never mind the contradictions, to the level of doctrine. For example, even as India is deepening its ties with America and its many pro-India allies, Mr Modi's government is playing to its domestic supporters by accusing the same countries of pushing an "anti-India" agenda.

In an interview last week Subrahmanyam Jaishankar, India's razor-sharp foreign minister, suggested a BBC documentary critical of Mr Modi's role during a bloody pogrom against Muslims in his native state of Gujarat was an attack on India by foreign powers. "There is a phrase called 'war by other means'. This is politics by other means...I don't know if election season has started in India, but for sure it has started in London and New York," he said. India's Western admirers are to a great extent willing to overlook such nonsense. Still, grandstanding and paranoia are not conducive to global leadership.

The G20's divisions over Ukraine helped ensure the gathering of finance ministers in Bangalore achieved little. The representatives of China and Russia refused to sign a painfully non-judgmental statement on the war and its economic consequences that India had pre-cooked; it stressed the existence of "other views and different assessments of the situation". Ahead of a meeting of foreign ministers in Delhi this week, Russia accused the West of "destabilising" the G20 by using "blackmail" to impose an anti-Russian "diktat". "It's becoming difficult for the G20 to engage in constructive discussion because of Russia's invasion of Ukraine," Japan's finance minister, Suzuki Shunichi, told reporters in Bangalore.

Restructuring sovereign debt is also a sticking-point, says Heribert Dieter of the German Institute for International and Security Affairs, in Berlin. "China has made it clear it will not participate in restructuring, and Western countries will not accept haircuts only for the money to be spent on paying China back." So is another Indian priority, climate finance, which has been stymied by Western countries' failure to honour long-standing undertakings on the issue, even as developing countries pile up additional demands for compensatory "loss and damage" payments. The G20 looks extremely unlikely to reach consensus, let alone take action, on any significant item on India's agenda.

It will burnish Mr Modi, though. Over the course of the year, cities across India, all decorated in G20 and Modi paraphernalia, will host foreign delegates at some 200 meetings. The slogan of India's presidency is: "Vasudhaiva Kutumbakam", or "One Earth, One Family, One Future". And one leader, an Indian observer might add. ■

Indonesia and ASEAN

South-East Asia’s leadership deficit

Joko Widodo is unlikely to fill the void

Last November, as the war in Ukraine raged, there were fears that the G20 summit in Bali would be ruined by no-shows and walkouts. But the talkfest was a modest success. China’s leader Xi Jinping met Joe Biden for the first time in person since he had become America’s president. The 20-member club issued a joint statement (the most debated paragraph, about Russia’s invasion of Ukraine, declared that most members condemned the war). Can Indonesia work the same magic as the new chair of the ten-member Association of South-East Asian Nations (ASEAN)?

The region could use some leadership. In the past two years Myanmar’s civil war is estimated to have cost 30,000 lives and displaced 2m people. China continues to bully its South-East Asian neighbours in the South China Sea. And ASEAN has struggled to exude the sense of purpose of the Pacific’s newer groupings, including the Quad, an initiative of America, Australia, India and Japan, and AUKUS, consisting of America, Australia and Britain.

Indonesia’s year-long turn at the helm should at least give ASEAN more prominence. The country is the region’s biggest economy and ASEAN’s so-called “first among equals”. Under President Joko Widodo, Indonesia, long a bystander in world affairs, has also exerted itself a bit more abroad. Jokowi, as the president is known, is a fan of “down to earth” diplomacy, which mainly translates as prioritising Indonesia’s economic advantage.

According to Rizal Sukma, a former Indonesian ambassador to Britain, the country’s diplomats are given three orders: to boost exports, foreign investment and tourism. The slogan of Indonesia’s ASEAN leadership is “epicentrum of growth”.

Yet that approach does not promise much action against China’s regional aggression. Jokowi’s signature economic policy is to extract more value from Indonesia’s rich mineral deposits. And no country is contributing more to that effort than China, which has invested billions of dollars into helping Indonesia process its nickel reserves, among the world’s largest. This has sometimes caused frictions within Indonesia. Chinese and Indonesian workers have come to blows at some Chinese projects. A China-backed high-speed rail project is running over deadline and budget. Still, Chinese investment of over $8bn in Indonesia in 2022 is a powerful reason for Jokowi not to push back at China to anything like the degree that some ASEAN members and America (which invested $3bn) would like him to.

The president is mainly concerned to protect Indonesian waters from Chinese maritime aggression. With that in mind, Indonesia recently signed a deal with Vietnam to demarcate their exclusive economic zones, which the two countries had previously contested. Jokowi is additionally keen to defend Indonesia’s sovereignty against China around the Natunas, east of Singapore. Though China does not claim the Indonesian islands directly, the “nine-dash-line” it has drawn around nearly the entire South China Sea bisects their waters.

Yet though this is an issue that affects most of ASEAN’s members, Jokowi is not likely to rally them on it. In truth, he appears to have no particular ambitions for Indonesia’s ASEAN helmsmanship beyond attracting more investment and trade.

His attitude toward Myanmar’s ruling junta will be a test of this. Last year ASEAN banned the generals from attending its meetings, pending progress on a notional peace plan, which would include a cessation of violence and the appointment of a regional envoy to the war-torn country. Myanmar has not implemented the plan. And ASEAN is split on how to respond.

Thailand tried to negotiate with the junta in December, through an unofficial dialogue which was boycotted by Indonesia, Malaysia, the Philippines and Singapore. Some ASEAN countries may argue that the election that the junta plans to hold in August should lead to a broader regional re-engagement. Jokowi has given conflicting signals. He says ASEAN will not be “held hostage” by the junta; also that Indonesia will send a general to Myanmar to hold talks. This does not augur a serious effort to end the country’s misery.

Jokowi’s three-point diplomacy

Indonesia is meanwhile gearing up for a presidential election due in February 2024. After two terms in office, Jokowi is not running for re-election. But the domestic issues that will dominate the campaign could still bleed into his foreign policy, one way or another. Fresh conflict between Chinese and Indonesian workers might put pressure on the president to push back on Chinese aggression a little harder. Or, perhaps more likely, it may persuade him to make his thorny regional leadership role even less of a priority than he otherwise would. ■

South Korean investing

Micro YOLO

SEOUL

Young South Koreans are thinking big by buying small

When a video of the Brave Girls performing “Rollin’” went viral in early 2021, Kim Seong-min saw an opportunity. He knew and liked the K-pop group from his time in the army, during which it had often performed for the troops. He therefore logged onto Musicow, a platform launched in 2016 where users can buy a small percentage of the rights to music royalties, and got himself some shares to the song for 670,000 won ($506) apiece. A few months later their value had doubled. Encouraged, he bought more.

Young South Koreans are unusually keen to put their meagre savings to work—perhaps because the country’s lacklustre jobs market makes it hard for them to buy property or support a family. A survey in 2021 found that eight in ten people in their 20s and 30s invest in stocks, cryptocurrencies or other assets. And they start young; 7% of shareholders in Samsung Electronics, a tech manufacturer, are in their teens.

Particularly in vogue are fractional investment platforms, which allow buyers to hold very small stakes in assets. Such investments exist worldwide, real estate being a particularly popular fractional-investing target. But South Korea, ever the fast adaptor, has been unusually adventurous in its offerings. Musicow’s 1.2m users trade rights to song royalties, hoping to pick the next chart-topper or *noraebang* (karaoke-room) classic. Tessa is one of several platforms trading in fragments of fine art, included works by Banksy and David Hockney. For as little as 1,000 won, investors can secure a tiny return when their painting is rented to a gallery or auctioned. On Bancow, users invest in calves; when their animal is sold, they split the profit with the farmer who reared it. “It’s the only

▸▸

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way to get rich and make honest money without breaking the law,” says Mr Kim.

Enthusiasts argue that fractional investments are safer than digital coins or traditional stocks. Crypto has had a horrendous run, starting last May with the crash of Luna, a South Korean coin. The KOSPI, an index of companies on the South Korean stockmarket, dropped by over 20% in 2022. That makes Musicow’s returns of nearly 9% in 2022 look appealing.

But this perception is often misplaced, says Hong Ki-hoon of Hongik University. Fractional investors are buying assets no “safer in terms of the financial risk than traditional assets”. Mr Kim is now learning this the hard way; “Rollin’” fragments are currently worth 334,000 won.

The Financial Services Commission (FSC), South Korea’s regulator, agrees with Mr Hong. It has classified the assets traded on Musicow as securities, and may take similar steps to constrain other fractional-investing platforms. It will be guided by the Howey test, an American rating of financial instruments, under which most fractional investments could in theory be classified as securities.

Yet the government wants to see the industry grow. The FSC has also deemed Musicow an innovative financial service. On February 5th it announced plans to allow the issuance of security tokens, a blockchain-based asset that facilitates fractional investment. The finance ministry has ruled that profits generated from fractional shares will not be subject to dividend or capital-gains taxes. Securities firms, encouraged by these developments, are rushing to strike deals with fractional-investing platforms. Entry-level investors should proceed more cautiously. ■

Banyan Whales’ teeth, not crocodile tears

New Zealand offers a lesson in atoning for past abuses in the Pacific region

IN LONDON RECENTLY, Penny Wong, Australia’s foreign minister, called on Britain to face up, in the Indo-Pacific, to the uncomfortable realities of its colonial past. Ms Wong’s forebears were from ethnic-Chinese communities that laboured in British Borneo’s perilous mines. Colonial stories, she said, “can sometimes feel uncomfortable—for those whose stories they are, and for those who hear them.”

Some in Britain’s ruling Conservative Party objected furiously to Ms Wong lecturing Britain on how to grapple with its past. Yet she raised an issue that will not go away. Britain has declared its intention to seek much deeper trade and security ties in the Indo-Pacific region. It is unlikely to succeed, Ms Wong intimated, in what she called “the most consequential region of our time”, unless Britain faces up to how an often-abusive history colours its relations there. Understanding the past, she said, “enables us to better share the present and the future. It gives us the opportunity to find more common ground.”

Patricia O’Brien, a historian of colonialism at the Australian National University, emphasises the point in an excellent piece in the *Diplomat*, a foreign-affairs magazine: “Reckoning with colonial pasts, in current times, makes for good diplomacy.” Britain and other former colonisers might consider this especially worthwhile if they wish to criticise the region’s new imperial power, China, on firm moral ground.

Britain, alas, is a past master at failing to reckon with its history (see Culture section). Among numerous illustrations, it has serially bungled its approach to atoning for its imperial slavery in the Caribbean, where its king remains the head of state of eight countries. Yet Britain is by no means the only power in the Indo-Pacific with a sordid past. During the Pacific war of 1937-45, imperial Japan massacred civilians, forced Chinese and Koreans into slave labour and conscripted tens of thousands of Korean and other “comfort women” into military brothels. Japan’s relations with its neighbours are still bedevilled by that history.

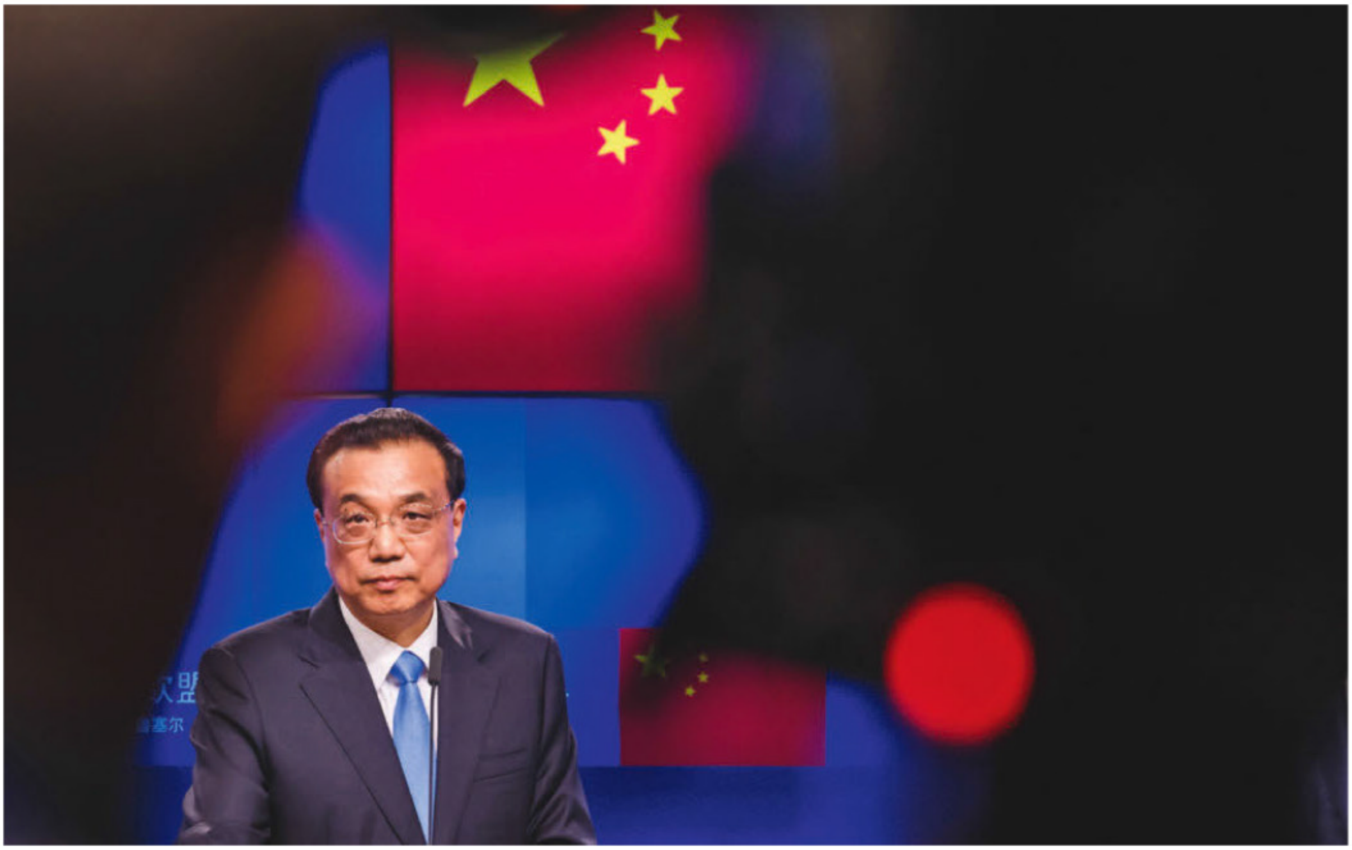
In the South Pacific, where white-British colonies, including Australia, became colonisers themselves, colonial wrongs remain a political minefield. But recent experiences there show how it is possible for countries to pick a way through it. New Zealand, in particular, is an exemplary apologiser.

An apology from a state is quite different from one offered by an individual. Meaningful political apologies are extended by the many to the individual—to victims of slavery, for instance, or to their descendants. There is, notes Hiro Saito of Singapore Management University, a performative dimension to the act. But the performance counts for nothing if the actors are not sincere.

Few could fault New Zealand for apologetic sincerity. In 2002 Helen Clark, then the prime minister, issued a moving apology for her country’s past mistreatment of Samoa. It included banishing its leaders and causing the death of over a fifth of the population, after New Zealand allowed a ship carrying Spanish flu to dock at the island-territory. Her apology was met with Samoan rituals of forgiveness. “Unfinished business”, as Ms Clark called it, can only be settled with the victims’ agreement.

Last August another New Zealand prime minister, Jacinda Ardern, volunteered an *ifoga*, a public display of humiliation and apology, for her country’s racist “dawn raids” in search of Pacific Islanders who had overstayed their work visas in the 1970s. Chris Finlayson, a former New Zealand attorney-general who negotiated dozens of apologies and financial settlements with *iwi*, Maori tribes, says: “If the Crown simply breezes in and says we’re sorry, they don’t accept it.” Apologies have to be specific and attuned to the victim’s sensitivities. “It is acknowledgment that certain things happened in history…and a promise that there will be a different way [in future].”

It helps perhaps that modern diplomatic apologies chime with a South Pacific tradition of atonement, of which *tabua*, polished sperm whales’ teeth used as gifts, are emblematic. Only in January the new prime minister of Fiji offered one to Kiribati. Yet even when such props are unavailable, doing the right thing is surely advisable. Not least because when states say sorry they are thinking more about opening up the future than closing down the past. At a time of bleak geopolitical contestation, there is a virtuous logic to that which even hard-headed strategists should keep in mind.



Li Keqiang

Bowing out

The prime minister is about to retire from politics. Under Xi Jinping, he has had little chance to shine

AT THE OPENING of the annual session of China's parliament on March 5th, the prime minister, Li Keqiang, will bow before nearly 3,000 delegates in Beijing's Great Hall of the People, before turning to bow again in the direction of the country's supreme leader, Xi Jinping. He will then deliver his final state-of-the-nation speech, laced with tributes to Mr Xi. A few days later, Mr Li will be replaced. It will mark the end of a striking era in Chinese politics, when two men with very different family backgrounds, different networks and, seemingly, different worldviews held the two top jobs. After Mr Li, only Mr Xi's men will have the limelight.

It is highly unlikely that anyone in the hall will openly muse about how different the country might have been if, instead of Mr Xi sitting at the centre of the dais, it had been Mr Li. Early this century it looked possible that it might turn out that way, with Mr Li—not Mr Xi—becoming paramount leader. Another remarkable feature of the past decade has been that a politician once seen as a strong contender for that role ended up serving as number two in the Communist Party hierarchy, showing little sign of resistance to the ever greater power that Mr Xi proceeded to amass at the expense of his own. It was not long after Mr Li took over as prime minister in 2013 that observers began to wonder whether his formal ranking overstated his authority.

The job of prime minister is often politically awkward in Communist-ruled China. It entails looking after the day-to-day running of government, usually with a focus on the economy. But the dividing line between this role and that of paramount leader is ill-defined. Tensions can ensue. Mao Zedong felt he had to draw his prime minister, Zhou Enlai, close "even as he raised the whip and sometimes lashed the man he could not live without", wrote Gao Wenqian, a historian, in a biography of Zhou published in 2008. In the 1980s feuds between prime ministers and general secretaries grew rancorous; the pro-democracy upheaval of 1989 was fuelled by one.

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But Mr Xi's relationship with Mr Li has not been like Mao's with Zhou. There has been little sign of dependence on Mr Li. On the contrary, Mr Xi, who became China's leader in 2012, has sidelined him, leaning more heavily for economic advice on Liu He. In their teenage years, Mr Liu and Mr Xi were friends. Mr Liu became one of Mr Li's deputies in 2018 and is about to retire, too.

Early last year rumours spread of a rift between Mr Li and Mr Xi. Some of Mr Li's remarks appeared aimed at calming businesspeople who had been spooked by a regulatory clampdown on big non-state firms. Analysts wondered whether he was signalling disapproval of Mr Xi's ideologically driven approach to economic management. In May Mr Li gave a televised speech to more than 100,000 officials, warning of dangers to the flagging economy and calling on them to work harder to boost growth. His emphasis seemed different from that of Mr Xi, who at the time was stressing the need to maintain stringent controls on the spread of covid-19.

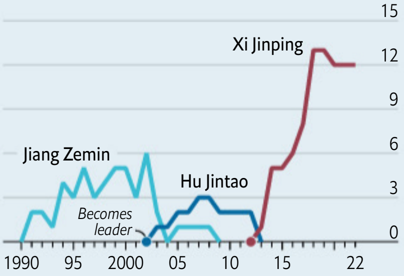
At a five-yearly party congress in October, some observers were surprised when Mr Li stepped down from all of his party positions even though, at the age of 67, convention would have allowed him to remain on the Politburo Standing Committee. Even then, he was due to give up his post as prime minister at this month's parliamentary session, having served the maximum of two terms. But he could have taken on another job, such as head of the legislature, the National People's Congress.

There is little compelling evidence, however, that Mr Li was engaged in a power struggle with Mr Xi, to whom he has been careful to pay homage (see chart). Some of the speculation may have been, in part, the product of wishful thinking, encouraged by a common perception of Mr Li as a pro-Western reformer. Unlike Mr Xi, who got a leg-up in his career thanks to the power of his father, a veteran revolutionary, Mr Li built his on academic ability. Mr Xi was accepted in 1975 to read chemical engineering at one of the country's most prestigious universities, Tsinghua. He was a "worker-peasant-soldier" student, chosen on the basis of his family background. In 1977 it was the result of a highly competitive exam that qualified Mr Li for his admission to Tsinghua's rival, Peking University, to study law and later economics. His professor, Li Yining, who inspired China's economic reformers, died on February 27th.

For most of the time that Mr Xi was at university, China was under Mao's grip or that of his conservative successor, Hua Guofeng. When Mr Li was a student, the political atmosphere was different. Peking University was a hotbed of liberal thinking. Mr Li rubbed shoulders with students who, after graduating, helped generate the intellectual ferment surrounding the democracy movement of 1989. One of them was Wang Juntao, who lives in exile in America. Mr Wang says Mr Li was "very interested" in political reform during his student days, but has kept such ideas to himself as prime minister because of Mr Xi's strength.

Dear leader

China, National People's Congress, mentions of the CCP* general secretary in government work report



Sources: National People's Congress; *The Economist*

*Chinese Communist Party

Mr Li has certainly not emulated his predecessor, Wen Jiabao, who, at his final news conference as prime minister in 2012, gave an unusually strong warning of the dangers of neglecting reform, especially of the "leadership system". Without changes, Mr Wen said, "such a historic tragedy as the Cultural Revolution may happen again". That was just a few months before Mr Xi took over and began chipping away at modest political reforms, such as a ban on personality cults and the adoption of a more collective style of leadership, that had been introduced in the 1980s to prevent the emergence of another Mao.

But businesspeople and diplomats who have met Mr Li have been impressed by his economic analysis. In 2007, when he was party chief of Liaoning province, he told America's ambassador that GDP figures there were "man-made" and unreliable, according to a leaked American memo. "He was always feeling like, I get cheated, people don't tell me the truth, and I have to get to the bottom of this to understand how to steer the economy," says Joerg Wuttke, the head of the EU Chamber of Commerce in China. "He was more of a professor-type, sometimes, than a power-broker."

In a few days the upcoming parliamentary session will "elect" Mr Li's successor (in reality, rubber-stamp Mr Xi's choice). The next prime minister is almost certain to be the nearly identically named Li Qiang, formerly the party chief of Shanghai, who took over as number two in the Politburo at last year's party congress.

Li Keqiang's career took off in the Communist Youth League—the alma mater of a different faction from the one that now surrounds Mr Xi. Li Qiang, by contrast, is a Xi protégé. That may give him authority that Li Keqiang lacked. If he uses it to steer Mr Xi away from heavy-handed party control over the economy, that may even be to the good, optimists say. But he would start the job with no experience at the top of central government and little public backing: his maladroit handling of a two-month lockdown in Shanghai last year was widely resented among its 25m residents.

Closeness to Mr Xi clearly trumps any such shortcomings. During the legislature's meeting, which is expected to last one or two weeks, it will become even more clear that all power emanates from the supreme leader and the numerous party bodies that he heads, rather than from government ministries led by the prime minister. Delegates will discuss a proposal for "reform of party and state institutions" that is expected to give the party more direct control over some government agencies. And they will give Mr Xi an unprecedented third five-year term as state president. Not that it matters much. As head of the party and its army, he is leader-of-everything anyway. ■

Arms exports

Shell shock?

Chinese weapons could revive Russia's failing war

FOR DECADES Russia pumped arms to China. On average it sent $2bn-worth every year between 2001 and 2010, with a bonanza $7bn deal in 2015. Now the tables have turned. Russia has lost over 9,400 pieces of equipment, including more than 1,500 tanks, during its botched invasion of Ukraine. It is desperately short of ammunition. America says it has intelligence suggesting that China is considering whether to supply Russia with weapons. That could change the course of the war. It would also trigger a deeper crisis in China's relationship with America and Europe.

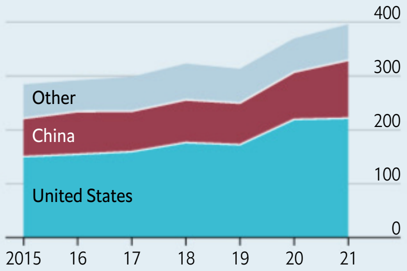
Russia has repeatedly asked China for arms since the early months of the war. China has repeatedly demurred, sending only non-lethal aid, such as helmets, and dual-use items, such as aircraft parts. American officials have not publicly disclosed details of what they think China is mulling. But on February 23rd *Der Spiegel*, a German magazine, claimed that Russia's armed forces were negotiating with Xi'an Bingo Intelligent Aviation Technology, a Chinese firm, to buy 100 attack drones. Russia has used such drones both on the front lines and, since October, as part of regular strikes on Ukraine's power grid.

A day after *Der Spiegel*'s report, the *Washington Post* cited American officials as saying that China was contemplating the dispatch of shells—the deadliest weapons of the war. Both Russia and Ukraine use Soviet-calibre 122mm and 152mm shells in their artillery pieces and have scoured the world for old stocks. But Russia is running out of friends to ask. It has cleaned out Belarus's warehouses. North Korea has supplied some, but is wary of depleting its ▸▸

Look out Lockheed

Arms sales by country of origin, $bn

20 largest arms-producing and military-services companies



Source: SIPRI

Russia would love those

arsenal. And Iran has few to give.

China has compatible shells. Little is known about the size and quality of its stockpiles, says Lonnie Henley, formerly of the Pentagon's Defence Intelligence Agency. But they would certainly suffice to stave off Russia's looming shell crisis. That would make a big difference to a conflict in which attrition is a critical factor and relative rates of shellfire have been decisive at times. Defence industries on both sides have struggled to ramp up production.

China has the heft to tip the scales. It is the world's fourth-largest arms exporter. Eight of its firms feature in the latest ranking of the world's top 100 arms companies by the Stockholm International Peace Research Institute, with seven in the top 20, second only to America. In recent years, the sales of China's top firms have grown considerably (see chart on previous page).

The war might also offer China an opportunity to reset and rebalance its defence relationship with Russia. For many years it imported Russian military technology, reverse-engineering much of it to make knock-off equipment. Between 2017 and 2021, 81% of its defence imports came from Russia, including the engines for the latest Chinese stealth fighters.

Now it has a chance to become "a relatively equal industrial partner for the Russian defence industry", says Michael Raska of the S. Rajaratnam School of International Studies in Singapore. Rather than simply sending basic kit, China could help Russia circumvent Western sanctions by sending high-tech components for drones, cruise missiles and other precision weapons. Mr Raska suggests China, in exchange, might want technology for the RD-180, a Russian rocket engine used for space launches (and potentially ballistic missiles). Submarine technology and jet engines would be attractive makeweights, too.

China's leadership is torn, though. It does not want to see Russia humiliated on the battlefield, not least at the hands of American rocket launchers and European tanks. Just weeks before the invasion Russia and China celebrated their "no-limits" friendship. Some in Beijing may also like the idea of diverting American energies to Europe and away from the Indo-Pacific.

But there are reasons for restraint. China is angry with the Kremlin that discussions over arms sale have been picked up by America and publicised, according to a European official familiar with the matter. China wanted any support to remain secret. It knows that underwriting Russia's campaign would explode its pretence to be a neutral mediator—a one-sided Chinese peace initiative published on February 24th was dismissed by Ukraine's allies. It would also further poison the relationship with America and provoke a backlash in Europe. Linda Thomas-Greenfield, America's envoy to the UN, and Josep Borrell, the EU's foreign-policy chief, have warned that lethal aid would cross a "red line".

For now, China is erring on the side of caution. Mr Borrell said that Wang Yi, China's top diplomat, had told him at a meeting on February 18th that China "will not provide arms to Russia". Of course, Mr Wang also claimed that China did not send arms to countries at war, something it does routinely. But on February 24th President Joe Biden expressed confidence that Mr Wang was at least being honest about the first part. "I don't anticipate a major initiative on the part of China providing weaponry to Russia," said Mr Biden. If Russia's battlefield position looks desperate in the spring or summer—when Ukraine hopes to launch an offensive—that forbearance will come under intense pressure. ■

Sycophancy in the civil service

Who's the boss?

How to prevent bureaucrats from kissing up

EMPEROR TAIZONG of the Tang dynasty is often regarded as one of China's greatest rulers, in part because he surrounded himself with intelligent and forthright advisers. His minister, Wei Zheng, defined a good official as one who does not flatter and dares to point out a ruler's mistakes. A bad official, according to Wei, always says yes to the ruler, attempts to please him by any means and goes along with him even when he is wrong.

Is China's current leader, Xi Jinping, surrounded by good officials? Last year he stacked the Politburo Standing Committee, the top leadership body, with loyalists who are unlikely to challenge him. But lower down, China's government is designed in a way that could be used to discourage sycophancy.

Each level of government has two heads: the person in charge of the local Communist Party committee, called the party secretary, and an administrative leader, such as a township chief. Because officials could potentially be evaluated by either, this could be a safeguard against sycophancy.

In a study to be published this month, researchers led by Alain de Janvry of the University of California, Berkeley, divided 3,785 entry-level civil servants into two groups. In one, they were told which of the two leaders would be evaluating them. In the other, the identity of the evaluator was kept secret. As one might expect, those in group one tried to please the evaluator, choosing tasks that were more important and observable to them. As a result, they got higher scores from them than from the other leader.

What if it is not clear who to flatter? In the second group the disparity in scores disappeared. These bureaucrats were assessed to be more productive. Their colleagues thought more of them, too. The authors observed a significant "performance gap" between group one and group two.

Ordinary Chinese have rising expectations of officialdom. If China wants to control sycophancy and improve the performance of bureaucrats, this study suggests leaving them in the dark about who is evaluating them. At the highest level of government, though, that's not possible. The seven members of the Standing Committee know exactly whom to flatter.

Chaguan | The fear factor

Next to China's irresponsible stand-off with America, the cold war looks almost like a model

IN CHINESE DIPLOMACY it is an argument-ending insult to accuse a foreign power of a "cold-war mentality". Such scorn is unfair to the original cold war. That confrontation saw America and allies seek to thwart and subvert the Soviet Union and its satellites in every domain short of direct superpower conflict. The resulting contest was terrifying, often irrational and marked by shameful acts on each side. But on a few specific occasions—for instance, the Cuban missile crisis of 1962—the prospect of nuclear annihilation inspired leaders on each side to a rare seriousness of purpose.

Increasingly, Sino-American relations are blighted by some of the worst aspects of that first cold war. By default, the other side's motives are assumed to be malign. Disputes are made intractable by flag-waving bombast, and by clashing accounts of reality. Just this week a foreign-ministry spokesperson in Beijing insinuated that covid-19 was brewed up by American military researchers, to counter American government assessments that the pandemic may have begun with a laboratory leak in China. Once more, arms build-ups threaten the balance of deterrence between the two sides. In recent years, Chinese pilots have flown recklessly close to American spy planes in international skies near China, risking mid-air collisions. But this time, the (occasionally) redeeming seriousness of the American-Soviet stand-off is missing.

The Sino-American competition is in danger of becoming a shallow, petulant parody of a cold war. Too many American politicians treat every interaction with China as a threat and as a chance to demonstrate patriotic resolve. Their bluster is often unfair, and also makes it harder to focus on challenges that matter. In Beijing, Communist Party leaders invoke principles that helped to keep an uneasy peace in the darkest days of the 1960s or 1970s, but for superficial, self-serving ends. Take the notion of "absolute security." Proposals for a new security architecture advanced by President Xi Jinping, China's supreme leader, revive old arguments about the bleak form of security generated when rival nuclear powers believe that war would lead to mutually assured destruction. Mr Xi sternly declares that: "No country should seek absolute security for itself at the expense of others' security." But Mr Xi repurposes that language and uses it to challenge American-led defensive alliances, notably in Asia. In his telling, defence treaties are a destabilising hangover of the cold war because they seek absolute "security for one or a few countries while leaving the rest insecure". That is sophistry, a fancy way to say that China dislikes it when neighbours try to build China-proof defences. More recently, Chinese officials have invoked the same principle to blame Russia's invasion of Ukraine on NATO enlargement.

Struck by these distorted echoes from the Soviet era, Chaguan sought guidance from a diplomatic veteran of the original cold war. Now 91, Thomas Pickering served the Kennedy administration as an arms-control negotiator and was later Bill Clinton's ambassador to Moscow, among many other posts. He recalls obstacles to peacemaking that have parallels in modern-day China. One involves the secrecy of the Soviet army, whose commanders developed weapons and doctrines of deterrence that civilian Soviet diplomats "knew almost nothing about", obliging Americans to explain "the panoply of Soviet arms as we understood it." Today, Chinese diplomats seem similarly out of the loop. The ones posted to Washington were startled when a spy balloon crossed America in February. When asked about the People's Liberation Army (PLA) building nuclear weapons at breakneck pace, China's foreign ministry responds with empty talking points.

Mr Pickering sees lessons for America and China in crises from decades ago. He recalls cold-war crises triggered by destabilising new technologies, such as anti-missile defences that seemed to upend the grim logic of nuclear deterrence. Some of these alarming episodes ended with ambitious arms-control pacts. Others were resolved with confidence-building agreements and surges of transparency. American and Soviet officials installed emergency hotlines. At times, the rival armies sent officers to count one another's nuclear warheads or to observe military exercises. In each case, "terror overcame a penchant for perfect secrecy," Mr Pickering says. Arguing that true crisis management involves listening as well as lecturing, he praises John F. Kennedy for urging Americans to look past provocative Soviet propaganda to see that "even Soviets might have legitimate concerns." Progress involved many hard steps. "In the meantime the fear quotient was very high," he remembers. He offers a compelling final thought. China and America are stuck trading superficial insults and threats, in part because they have not lived through a really terrifying crisis.

China grows more tolerant of risk

Zhang Tuosheng is a former instructor at the PLA's military academy and now at Grandview, a think-tank in Beijing. He shares Mr Pickering's concern that America and China do not feel enough urgency about crisis management. Alas, he sees a gulf of understanding dividing the two powers. America wants to talk about safely flying and sailing close to China, and about rules of warfare for advanced weapons. In contrast, China blames America for threatening its national security by intruding in its backyard, or by upgrading ties with Taiwan. In his telling, China feels that America first creates crises, then demands better management of them.

Zhao Tong, an arms-control expert with the Carnegie Endowment for International Peace, suggests that China is consciously accepting higher tensions and short-term risks. He says that in Chinese thinking, America is the aggressor and would have backed off by now if it truly feared a catastrophe. Accordingly, China believes that scaring America more will reduce long-term risks.

Veterans of the original cold war shudder at such reckless logic, for they recall when terror was a spur to restraint. In China's contest with America, a lack of fear is the scariest thing of all. ■

Preserving rainforests

The rule of saw

ITAITUBA, SINGAPORE AND VIRUNGA

The biggest obstacle to saving rainforests is lawlessness

The pickup trucks left before dawn. Their occupants—six military police and nine agents from Brazil's national parks service—wore bulletproof vests. Their target was an illegal gold mine deep in the Amazon. To save the rainforest, Brazil's new government is trying to catch the criminals who cut it down.

First, though, it must find them. Satellite images had revealed the location, 140km from Itaituba, a city in the state of Pará. After seven hours of driving, two men on a motorbike spotted the convoy and sped off to alert the miners. The trucks gave chase, but got stuck in knee-deep mud. Five kilometres from their target, the forces of law and order had to turn back.

That gave the wildcatters time to hide their equipment, which the agents would have torched. A follow-up raid is unlikely. The Pará office of ICMBio, Brazil's national parks agency, oversees 9m hectares of protected forest—an area the size of Hungary. There are perhaps 2,000 illegal mines (known as *garimpos*) on its patch.

The Amazon "has been blackened over the [past] half-century by the dual flames of fire and lawlessness", argues Heriberto Araújo, a Spanish journalist, in "Masters of the Lost Land", a new book. Josiclaudio, one of the agents on the failed raid in Pará, agrees. "It's easy to beat the system," he said, as the trucks passed a stretch of federal land dotted with burnt tree stumps, evidence of recent illicit forest-clearing. An opportunistic rancher had already plopped down several hundred cows on it.

The destruction of the world's rainforests is not only a scandal; it is a colossal market failure. Rainforests brim with biodiversity and help regulate the water cycle. Most importantly, the forests are giant carbon sinks. Deforestation accounts for 7% of global carbon-dioxide emissions. Daniel Nepstad of the Earth Innovation Institute, an American non-profit organisation, estimates that clearing and burning a hectare of the Amazon pumps 500 tonnes of carbon dioxide into the atmosphere. If each tonne causes $50 of harm by accelerating global warming (an official American estimate), then the total damage is $25,000.

Set against this, the profits are puny. The soil under the Amazon is not particularly fertile. On average, a hectare of freshly cleared pasture sells for about $1,200. Not counting the effect on biodiversity, the social costs of Amazonian deforestation are about 30 times the benefits, estimates Dr Nepstad. Yet still the chainsaws whirr. The area of Earth covered by primary tropical rainforest has dwindled by 6.7% since 2000. The problem, of course, is that the benefits of conservation accrue in imperceptibly thin slices to everyone in the world, whereas the benefits of deforestation go in large, lucrative chunks to the men wielding the chainsaws.

Just words on paper

The world's governments, at least in theory, should be able to fix that market failure by paying the custodians of the rainforests not to chop them down. This idea was pressed hard in November at COP27, an annual UN climate conference. Brazil, Indonesia and the Democratic Republic of Congo, the three countries with the biggest rainforests, signed a pact to work together to curb deforestation, and to urge other countries to help finance it.

If rainforests were in countries where property rights were clear and the rule of law was strong, it would be straightforward to pay the landowners to conserve them. ▸▸

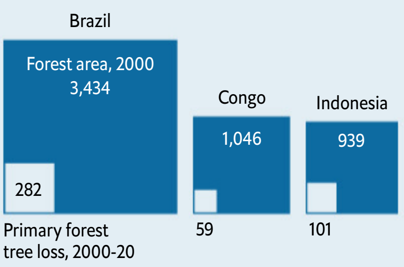
Where property rights are muddled and the rule of law is weak, however, whom do you pay, and how do you know he or someone else won't chop down the forest anyway? Alas, rainforests are often in the second kind of country.

Laws to protect the forests are typically strict on paper. But often the political will to enforce them is lacking, or the relevant institutions are rickety. Forested areas are sometimes so remote that the law cannot reach them, as that aborted raid in Pará illustrates. Local people may not support law-enforcement because they think clearing the forest will make their communities better off. And outsiders who might fund conservation, such as foreign donors or corporate buyers of carbon offsets, are nervous of sending money to countries where corruption is widespread.

To understand how hard it is to replace the rule of the chainsaw with the rule of law, it helps to look at the three rainforest titans. Brazil and Indonesia are middle-income democracies where the rule of law is patchy but improving. Congo is much poorer, autocratic, charred by conflict and practically lawless.

Brazil has seen the most destruction (see chart 1), but is now full of hope. Until January it was led by Jair Bolsonaro, a president who actively sabotaged efforts to curb illegal logging and mining. Voters have replaced him with Luiz Inácio Lula da Silva (universally known as Lula), who is cracking down again. Brazil's laws are stringent. Almost half of its Amazon biome has protected status, including national parks and reserves set aside for indigenous inhabitants. And on private land in the Brazilian Amazon, ranchers and farmers can deforest just 20% of their holdings.

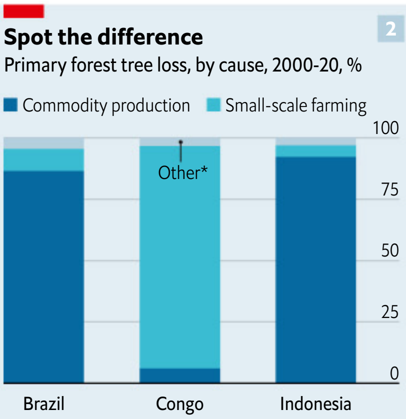
Yet a gulf yawns between law and reality. Start with geography. The Amazon is twice the size of India and spans nine countries. The forest's empty vastness has long inspired paranoia. The military regime that ran Brazil from 1964 to 1985 feared that foreigners would encroach, so it built roads and urged Brazilians to move in. Incomers cleared tracts, sold the timber and planted crops. Desperadoes pushed out indigenous folk and bribed officials to stamp bogus title deeds.



Logging the losses

Primary forest, '000 sq km

Source: Global Forest Watch



Spot the difference

Primary forest tree loss, by cause, 2000-20, %

*Includes forestry, wildfires and urbanisation

Source: Global Forest Watch

Lula was previously president between 2003 and 2010. His government tried to curb impunity, hiring thousands of environmental agents, using satellites to spot deforestation, and expanding conservation areas by more than 30%. Donors were impressed: Brazil received more than $1bn through a mechanism called the Amazon Fund. The pace of deforestation slowed by more than 80% between 2004 and 2012.

But then it accelerated again. A new forest code passed in 2012 granted an amnesty for any deforestation that occurred before 2008. This created an incentive for future clearing, says Cláudio Almeida of the National Institute for Space Research (INPE), which gathers satellite data on deforestation. Land-grabbers "concluded that the rules will always change in the future".

Mr Bolsonaro took over in 2019. A former army captain and the son of a wildcat gold miner, he abandoned the anti-deforestation plan, hog-tied the Amazon Fund, cut the environment ministry's budget, and halted the imposition of fines for forest-related crimes. In 2019 he ordered Ibama, the environment ministry's other enforcement arm, to stop destroying equipment seized from illegal loggers and miners. In 2021 he visited a wildcat mine in an indigenous territory—where such operations are banned by the constitution—and told miners he planned to make it legal. During his time in office, deforestation in the Amazon jumped by 60%.

Since Lula came back to power, he has started to enforce the law again. He raised ICMBio's budget by 55% and brought back his tough former environment minister, Marina Silva. On February 8th her ministry launched an operation to drive more than 20,000 illegal miners from Brazil's largest indigenous territory, home to the Yanomami tribe. The more policing operations succeed, says Ms Silva, the more the "pendulum will swing", until the risks of law-breaking outweigh the rewards.

However, "if enforcement is the only card we have to play, we are going to lose," says Bruno Matos, who works at ICMBio. "Most miners can barely read or write, they don't have any other option," says Ronaldo, a pump operator at a wildcat mine interviewed by *The Economist*. Cracking down on illegal mining without putting something else in its place will cause "a social calamity", warns Gilmar de Araújo of a local mining union.

In Itaituba and neighbouring Jacareacanga, Bruno Rolim, a local official, estimates that 30,000 people work in what he delicately calls "unregulated" gold mining, and 300,000 depend on the money they earn. Warehouses in town openly sell excavators and pumps. Petrol stations rent out airstrips for smugglers' planes. Bumper stickers proclaim that "GARIMPEIROS AREN'T CRIMINALS". Officials trying to curb deforestation have been ambushed with homemade bombs. The mayor of Itaituba, a rancher and miner known as the "King of Garimpo", has been fined several times for illegal deforestation. He is still in office, and popular.

Land-grabbing has become a industry. It is known as *grilagem*, after the common trick of putting a phoney title deed in a box of crickets (*grilos*), whose droppings and nibbles make the paper look much older than it is. Land-grabbers invade public land, deforest it, and sell it to ranchers. When the ranchers move on, they resell it to soya farmers. Brazil's land titling system is such a mess that no one can keep track. In some parts of Pará, reports Mr Araújo, overlapping claims add up to five or six times the disputed area.

Clearer property rights would let owners invest for the long run, rather than stripping land and flipping it. They would also make it easy to identify who should be paid for conserving land, or fined for spoiling it. A study by João Paulo Mastrangelo and Alexandre Gori Maia of the University of Campinas found that when there are no overlapping claims for Brazilian land, it is less likely to be deforested and more likely to be used lawfully.

Progress is possible

Indonesia, too, has a vast territory and a history of lawlessness. Under Suharto, a dictator who ruled from 1967 to 1998, cronies won concessions to clear forest and set up palm-oil plantations. After Suharto's fall, power was democratised and decentralised. But deforestation continued, as provinces and towns raced to grant logging rights in return for royalties and bribes.

Indonesia has lost more than a third of its primary rainforest since 2000. Strip out the huge and mostly undeveloped province of Papua, and the picture is bleaker. On Java and Sumatra, the most populous islands, lowland forests are disappearing.

Peatlands have been drained and burned to make way for palm oil and other crops. Peat is boggy, partly decomposed plant matter that traps large amounts of carbon. Deforestation and peat-burning in Indonesia cause more emissions than industry, coal power and transport combined.

Yet things have started to improve. In 2011, after repeated complaints from neighbouring countries about the stinging haze from burning peatlands, Indonesia's then president, Susilo Bambang Yudhoyono, imposed a moratorium on clearing primary forests and peatlands for logging or plantations. In 2019 the current president, Joko Widodo, made it permanent.

Some loggers find ways around the ban, and some officials slyly redraw maps to exclude forests from protection. But democratisation has strengthened the rule of law. The government and big palm-oil firms sometimes lose in court, something unheard of in Suharto's day. Local residents, NGOs and lawyers can now push back against the powerful, observes Herry Purnomo of the Centre for International Forestry Research, itself an NGO. Corruption still exists. But local officials can lose elections if they ignore these other voices.

Although Indonesia's forests are still shrinking, the pace has slowed sharply in recent years. In 2021 it fell for a fifth straight year, down by a quarter compared with 2020, according to the World Resources Institute (WRI), another NGO. Last year Indonesia hardened its carbon-emissions targets, and pledged to make its forests, peatlands and plantations a net carbon sink again by 2030.

Congo's rainforest has suffered less damage than Brazil's or Indonesia's, partly because the country is so poor that few Congolese can afford chainsaws. Typically, subsistence farmers use hand tools to gather wood for fuel and to clear small patches of land to plant crops (see chart 2 on previous page).

However, if modern means to slice down trees become widely available in Congo before the country is able to regulate them, an environmental disaster looms. And today, Congo borders on anarchy. Militias pillage vast swathes of the country. Among 31 African countries analysed by the OECD, a rich-country group, only Nigeria collects less tax as a percentage of GDP. Property rights barely exist in rural areas. Villagers are often driven from their homes at gunpoint.

Signs of environmental trouble can be seen from a small plane above Virunga National Park in eastern Congo. The landscape is still verdant, but patches of brown and plumes of smoke are visible, too. Satellite data analysed by the University of Maryland suggest that deforestation in Virunga accelerated in 2021, driven by demand for charcoal, which helps fund local militias. From 2016 to 2021 Congo lost 500,000 hectares of primary forest every year, more than twice the average recorded from 2002 to 2015, estimates Forest Pulse, an initiative run by the WRI.

Rotten timbers

How much can outsiders help? Lula is urging rich countries to keep their promise to give $100bn a year in climate finance to poorer countries, and arguing that protecting rainforests should be part of that. Brazil, at least, will surely get more now that the logger-hugging Mr Bolsonaro is gone.

Private firms, meanwhile, can help squeeze criminality out of supply chains. Nudged by activists and consumers, companies that deal in palm oil and paper are tightening standards. Indonesia supplies about half of the world's palm oil. These days four-fifths of its refining capacity is run by companies that have pledged "No deforestation, no peat and no exploitation" (NDPE). Strikingly, and for the first time, rises in the price of palm oil since 2020 do not appear to have caused more deforestation in Indonesia.

Companies that have nothing to do with rainforests directly—such as airlines or power-generation firms—are getting involved through "carbon credits", which allow them to offset emissions by doing good elsewhere. One popular option is to pay others to avert deforestation.

Such schemes rely on a crucial assumption: that paying for a certificate really does prevent tree-chopping. Some studies have estimated that far less is averted than is claimed. An investigation published in January by *Die Zeit*, the *Guardian* and *Source Material*, another NGO, concluded that most of the offsets certified by Verra, the leading certifier of such schemes, were "likely to be worthless".

Verra hotly disputes this, finding fault with the article's methodology and describing its own way of calculating averted deforestation as "robust" and "continually" improving. But companies nonetheless have grown nervous. Perhaps for this reason, global purchases of voluntary carbon credits stagnated at around $2bn in 2022, having been growing rapidly before. In 2022 Indonesia suspended the sale of carbon credits related to its rainforests, citing the need for clearer rules and to avoid double-counting. Frances Seymour of WRI says that 2023 will be "a make-or-break year" for the market.

The law in action

One promising idea is to shift from funding lots of local projects, which can be hard to track, to paying a larger political unit, such as a province or state. Dr Nepstad sees great potential for such "jurisdictional" credits. Brazilian states could reap $13bn-48bn from them by 2030, he reckons, calling it "an unprecedented opportunity to finance the Amazon's transition to...a carbon-positive, socially inclusive economy". And if fewer Brazilians' livelihoods are harmed by conservation, perhaps fewer will vote to re-elect Mr Bolsonaro, or someone like him, in 2026.

For jurisdictional carbon credits to work, though, the buyer has to be able to trust the seller. That can be hard. In 2021 Congo's president, Félix Tshisekedi, agreed to cut the pace of deforestation in exchange for a pledge of $500m over five years from a donor-funded project called the Central African Forest Initiative (CAFI). But the Congolese state lacks the capacity to monitor events on its huge, nearly roadless territory, let alone control them. The elite are unco-operative. In 2020 the government published an audit which found that the previous six environment ministers had illegally sold off logging licences despite a moratorium on new concessions.

Last year an American start-up proposed a pilot project in which it would create a registry of Congo's carbon assets. This would have stored the precise locations of the carbon-sucking areas, allowing buyers to track whether deforestation happened there. The plan was blocked by a minister, according to a source familiar with the discussions. The firm and the government refused to comment.

In any country, though, strengthening the rule of law takes time. Mr Almeida of INPE in Brazil advocates a new law to sort out land titling in the Amazon. Those who cannot prove ownership should be kicked out, he says; the few with valid deeds for land that is now part of a conservation area would be compensated. But such reforms could take decades to bed in. Carlos Nobre, a Brazilian scientist, predicts that when 20-25% of the Amazon is destroyed, the forest will pass a tipping point. Its water-recycling system will break down, drying out what is left. Huge areas will turn to savannah. Already, 17% of it has gone. ■

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Venture capital

The big squeeze

SAN FRANCISCO

How the titans of tech investing are staying warm over the VC winter

VENTURE CAPITALISTS are not known for humility. But many have been striking a humbler tone of late. In a recent letter to investors Tiger Global, a hedge fund and venture-capital (VC) investor, reportedly admitted that it had "underestimated" inflation and "overestimated" the boost from the covid-19 pandemic to the tech startups in its portfolio. In November Sequoia, a Silicon Valley VC blue blood, apologised to clients after the spectacular blow-up of FTX, a now defunct crypto-trading platform that it had backed. In January Jeffrey Pichet Jaensubhakij, chief investment officer of GIC, one of Singapore's sovereign-wealth funds, said he was "thinking much more soberly" about startup investing.

The VC giants' contrition comes on the back of a gigantic tech crash. The tech-heavy NASDAQ index fell by a third in 2022, making it one of the worst years on record and drawing comparisons with the dotcom bust of 2000-01. According to Silicon Valley Bank, a tech-focused lender, between the fourth quarters of 2021 and 2022, the average value of recently listed tech stocks in America dropped by 63%. And plunging public valuations dragged down private ones (see chart 1 on next page). The value of older, larger private firms ("late-stage" in the lingo) fell by 56% after funds marked down their assets or the firms raised new capital at lower valuations.

This has, predictably, had a chilling effect on the business of investing in startups. Soaring inflation and rising interest rates made companies whose profits lie primarily in the distant future look less attractive today. Scandals like FTX did not help. After a bull run lasting a decade, the amount of money flowing into startups globally declined by a third in 2022, calculates CB Insights, a data firm (see chart 2). Last quarter it fell to $66bn, two-thirds lower than a year earlier; the number of mega-rounds, in which startups raise $100m or more, fell by 71%. Unicorns, the supposedly uncommon private firms valued at $1bn or more, became rare again: the number of new ones contracted by 86%.

This turmoil is forcing the biggest venture investors—call them the VC whales—to shift their strategies. For Silicon Valley, it signals a return to a forgotten venture capitalism, with fewer deep-pocketed tourists splashing the cash and more bets on young companies by local stalwarts.

To understand the scale of VC's reversal of fortune, consider the boom. Between 2012 and 2021 annual global investments grew roughly ten-fold, to $638bn. Conventional VC firms faced competition from beyond Silicon Valley in the form of hedge funds, venture arms of multinational companies and sovereign-wealth funds, some of which began investing in startups directly. Dealmaking turned frenetic. In 2021 Tiger Global inked almost one new deal a day. Across VC-dom activity "was a bit unhinged", says Roelof Botha, boss of Sequoia Capital, "but rational", given that low interest rates made money virtually free. And "if you weren't doing it, your competitor was."

What passed for rationality in the boom times now looks a bit insane. The downturn has spooked the VC funds' main sources of capital—their limited partners (LPs). This group, which includes everyone from family offices and university endowments to industrial firms and pension funds, is

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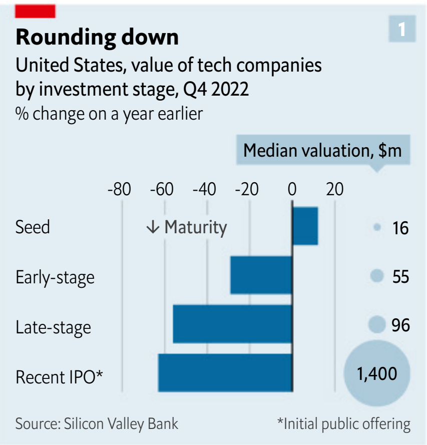


Rounding down
United States, value of tech companies by investment stage, Q4 2022
% change on a year earlier

Source: Silicon Valley Bank *Initial public offering

growing nervy. And stingy: lower returns from their current investments leave LPs with less capital to redeploy, and collapsing stockmarkets have left many overallocated to private firms, whose valuations take longer to adjust and whose share of some LPs' portfolios thus suddenly exceeds their quotas. Preqin, a data provider, finds that in the last three months of 2022 new money flowing into VC funds fell to $21bn, its lowest level since 2015.

What new VC funding there is increasingly goes to mega-funds. Data from PitchBook, a research firm, show that in America in 2022 funds worth more than $1bn accounted for 57% of all capital, up from 20% in 2018. How the VC whales behind these outsize money pools adapt to the VC winter will determine the shape of the industry in the years to come.

The venture cetaceans can be divided into three big subspecies, each typified by big-name investors. First there is the conventional Silicon Valley royalty, such as Sequoia and Andreessen Horowitz. Next come the private tourists, such as Tiger and its New York hedge-fund rival, Coatue, as well as SoftBank, a gung-ho Japanese investment house. Then there are the state funds, such as Singapore's GIC and Temasek, Saudi Arabia's Public Investment Fund (PIF) and Mubadala of the United Arab Emirates. As well as investing directly, they are LPs in other VC funds; PIF, for example, is a large backer of SoftBank's Vision Fund.

In 2021 alone these nine institutions ploughed more than $200bn into startups, from young companies to older ones looking to grow, or roughly a third of the global total. All nine whales have been badly damaged by last year's crash. Sequoia's crossover fund, which invested in both public and private businesses, reportedly lost two-fifths of its value in 2022. Temasek's listed holdings on American exchanges shrank by about the same. SoftBank's mammoth Vision Funds, which together raised around $150bn, lost more than $60bn, wiping out their previous gains; in a sign of just how bad things were, its typically garrulous boss, Son Masayoshi, sat out the latest earnings call on February 7th. Tiger reportedly lost over half the value of its flagship fund and marked down its private investments by a quarter, torching $42bn in value and leading one VC grandee to speculate that it might turn itself into a family office.

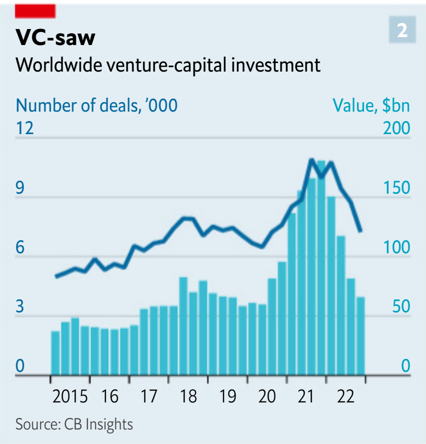
All three groups have reined in investments. But each has responded to the crunch in distinct ways—in part because it has affected them to different degrees.

The private outsiders have been hardest hit. The combined number of startup bets by the trio in our sample fell by 76% between the second half of 2021 and the same period in 2022. Tiger has cut the target size for its latest fund from $6bn to $5bn; its previous one raised $13bn. In October Philippe Laffont, Coatue's boss, said the hedge fund was holding 70-80% of its assets in cash. It has raised $2bn for its "tactical solutions fund", designed to give mature startups access to debt and other resources, as an alternative to raising equity at diminished valuations. SoftBank has all but stopped backing new startups; in the second half of 2022 most of its capital went to well-performing portfolio firms, says Lydia Jett, a partner at the Vision Fund.

Avoiding tourist traps

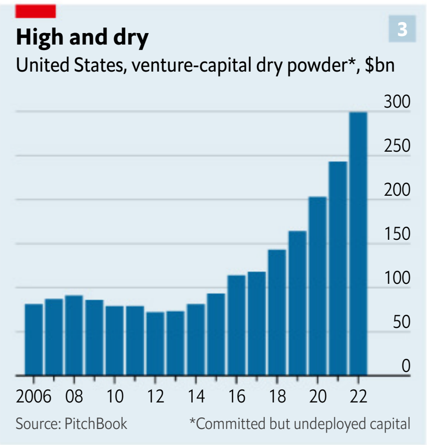
The other two groups are also retrenching, if not as drastically. According to data from PitchBook, in the second half of 2022 the number of deals struck by Sequoia and Andreessen Horowitz fell by a combined 47%, year on year. Direct investments by the four sovereign funds in our sample fell by a more modest 31% in the period, no doubt thanks to their deeper pockets and longer horizons.

The slowing pace of investment has left VC investors with a record amount of capital that LPs had already pledged to stump up but that has yet to be put to use. Last year this "dry powder" was just shy of $300bn in America alone (see chart 3). PitchBook data suggest that our five private whales are sitting on a combined $50bn or so; the four sovereign investors hold their numbers close to their chest but their dry powder could be of a similar order of magnitude. Some of it may wait a while to be deployed, if it ever is. But some will find grateful recipients. Who they are, too, depends on which whales you look at.



VC-saw
Worldwide venture-capital investment

Source: CB Insights



High and dry
United States, venture-capital dry powder*, $bn

Source: PitchBook *Committed but undeployed capital

The old-school VCs and the hedge funds are focusing on younger firms, in part because volatility in the public markets makes it harder to value mature ones hoping to list soon. Mr Botha says Sequoia doubled the number of "seed" deals with the youngest startups in 2022, relative to 2021. In January the firm launched its fifth seed fund, worth $195m. Last April Andreessen Horowitz launched an "accelerator" programme to nurture startups. About half the startups Tiger backed in 2022 were worth $50m or less, compared with just a fifth in 2021, according to PitchBook.

Early-stage firms won't be the sole beneficiaries. David DiPietro, head of private equity at T. Rowe Price, a fund-management group, thinks startups selling "must-have" products like cyber-security or budgeting software should do well. Money will also keep flowing to well-run businesses with strong balance-sheets, expects Kelly Rodriques, boss of Forge, a marketplace for private securities. Firms with buzzy new technologies, such as artificial-intelligence chatbots and other whizzy "generative AI", will keep attracting capital—especially if the tech works in practice and underpins a viable business model.

Another category of startups likely to gain favour is those involved in industries politicians deem strategic. In America, that means climate-friendly technology and advanced manufacturing, on which Uncle Sam is showering subsidies and government contracts. Some 8% of the deals our whales made in the second half of 2022 involved companies working on climate tech, for example, up from 2% in the same period of 2021. Last year Andreessen Horowitz launched an "American Dynamism" fund, which partly invests in businesses that rely on government procurement, ▸▸

such as Anduril, a defence-tech startup.

Sovereign-wealth funds will be looking elsewhere. Seed deals are too small for them: whereas the typical early-stage American firm is worth about $50m, in 2021 the median value of startups backed by the sovereign funds was a whopping $650m. And what counts to them as "must-have" startups is somewhat different, determined less by the market or others' strategic imperatives, and more by their own governments' nation-building plans.

On February 16th PIF said it would take a stake in VSPO, a Chinese platform for video-game tournaments. This is part of a plan dreamed up by Muhammad bin Salman, the Saudi crown prince, to invest $38bn in "e-sports" by 2030. Temasek invests heavily in firms that develop ways to boost food production, motivated by Singapore's goal of producing 30% of the city-state's nutritional needs locally by 2030, up from about 10% in 2020. In the past year it has backed Upside Foods, which grows meat in a lab, and InnovaFeed, a maker of insect-based protein. Rohit Sipahimalani, Temasek's chief investment officer, thinks that over the next few years his focus will shift towards "breakthrough innovation rather than incremental innovation", on the back of state support for strategic tech.

Eastbound and down

One group of firms is likely to see less interest from our whales. Notwithstanding PIF's gaming deal, and the easing of the Communist Party's two-year crackdown on consumer technology, the VC titans are wary of China, until recently one of the world's hottest startup scenes. An executive at a big venture fund says that in the past, foreign investors in China knew the government would respect their capital. Now, he sighs, it seems to have "pulled the rug out from underneath us".

Tiger talks of a "high bar" for new investments in China. GIC has reportedly scaled back its investments there. Mr Sipahimalani says diplomatically that he is trying to avoid "areas caught in the cross-hairs of US-China tension". Sequoia is is said to be asking external experts to screen new investments made by its Chinese arm into quantum computing and semiconductors, two such contentious fields. The number of our whales' deals with Chinese startups fell from 22% of the total in 2021 to 16% in 2022.

After the dotcom crunch VC investments needed nearly 20 years to return to their previous high. Today's tech industry is more mature. Startups' balance-sheets are stronger and, according to Silicon Valley Bank, their peak valuations relative to sales lower than in 2000-01. This time the whales of VC won't need 20 years to nurse their wounds. But the experience will have lasting effects on whom they back. ■

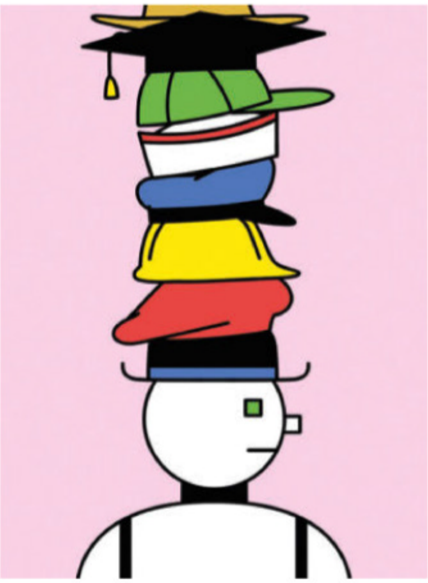
Generative AI

Intelligence services

Investors are going nuts for ChatGPT-ish artificial intelligence

Since ChatGPT's launch in November, a mini-industry has defied the broader slump in tech. Not a week goes by without someone unveiling a "generative" artificial intelligence (AI) based on "foundation" models—the vast and complex algorithms that give ChatGPT and other AIs like it their wits. On February 24th Meta, Facebook's parent company, released a model called LLaMA. Elon Musk, boss of Tesla and Twitter, reportedly wants to create an AI that would be less "woke" than ChatGPT. One catalogue, maintained by Ben Tossell, a British entrepreneur, has just grown to include, among others, Isaac Editor (which helps students write essays) and Ask Seneca (which answers questions based on the stoic philosopher's writings). ChatGPT may be much talked about and, with over 100m users, talked to. Yet Mr Tossell's database hints that the real action in generative AI is in all manner of less chatty services enabled by foundation models.

Each model is trained on reams of text, images, sound files or other data. This allows them to interpret instructions in natural language and respond with text, art or music. Though such systems have been around for some time, it took a consumer-facing service such as ChatGPT to capture the world's—and investors'—imagination. As Mike Volpi of Index Ventures, a venture-capital (VC) firm, says, this happened just as his fellow tech backers, burned by the cryptocurrency crash and the empty metaverse, were on the lookout for the next big thing. In addition, even more than web browsers and smartphones, foundation models make it easy to build new services and applications on top of them. "You can open your laptop, get an account and start interacting with the model," says Steve Loughlin of Accel, another VC firm.



Money is flooding into the business. In January it was reported that Microsoft poured $10bn in OpenAI, the startup behind ChatGPT, on top of an earlier investment of $1bn. Pete Flint of NFX, another VC firm, now counts more than 500 generative-AI startups. They have so far collectively raised more than $11bn—and that is excluding OpenAI. Mr Volpi talks of a "Cambrian explosion".

So which generative-AI platforms will make the big bucks? For now, this is the subject of head-scratching in tech circles. "It's just not clear if there will be a long-term, winner-take-all dynamic in generative AI," wrote Martin Casado and colleagues at Andreessen Horowitz, one more VC firm, in a recent blog post. Many startups offer me-too ideas, often more feature than product. Even the resource-intensive foundation models may end up as a low-margin commodity: though proprietary ones such as OpenAI's GPT-3.5 are ahead, open-source alternatives aren't far behind.

Generative AI is also tiptoeing into a legal minefield. The models often get things wrong. And they can go off the rails. Sydney, the chatbot Microsoft is developing for its Bing search engine using OpenAI's tech, has insulted a few users and professed its love to at least one (it has since been reined in). AI platforms may not enjoy the legal protection from liability that shields social media. Copyright holders of web-based content on which existing models are being trained without asking permission or paying compensation are up in arms. Getty Images, a repository of photographs, and individual artists have filed lawsuits against AI art-generators such as Stable Diffusion. Stable Diffusion says, "We take these matters seriously. We are reviewing the documents and will respond accordingly." News outlets fear text-gobbling AIs, too (see subsequent article).

OpenAI is already downplaying the launch later this year of GPT-4, the highly anticipated update to its foundation model. It won't temper VC types' appetite for generative AI. For more risk-averse investors, the safest bet at the moment is on the providers of the ample processing power needed to train and run foundation models. The share price of Nvidia, which designs chips useful for AI applications, is up by 60% so far this year. Cloud-computing services and data-centre landlords are rubbing their hands, too. Whichever AI platform comes out top, you can't go wrong selling picks and shovels in a gold rush. ■

Business in India

The angels' share

MUMBAI

India's taxman goes after investments in young companies

Startups in India, as elsewhere, are in trouble. Venture-capital (VC) investments in January were down by 80%, year on year, according to Inc42, an online publication. Many of the reasons are familiar, too: money is no longer free; local banks pay more on deposits; once-hot business models like food delivery or online learning have not lived up to expectations; and crashing valuations are undermining the credibility of the market. Now Indian firms face another, idiosyncratic hurdle.

A new tax provision buried in the latest annual budget, which is being debated in parliament, broadens a rule from 2013 that treats most investments from unregistered VC backers, such as rich individuals, family offices and other such "angel" investors, as the recipient's income if the accompanying valuation is "in excess of fair value". The tax currently applies to money from Indian sources. The new version would extend to largesse from any foreign investor, including VC firms and pension funds, not registered with India's securities regulator.

As with many Indian rules, the "angel tax" was born of scandal. Details are murky but a state official in southern India had allegedly got around tax rules by directing money through a shell company and declaring the proceeds to be investment, not taxable income. The levy was an attempt to curb such excesses. For startups with scant revenues today and high valuations predicated on hoped-for future profits—which is to say most young tech companies—it is a considerable burden. Firms must show tax authorities sales projections, along with costly endorsements of fundraising valuations from accountants and bankers. The angels, for their part, get intrusive calls from the taxman about where their money came from. Many simply give up.

The experience of Nikunj Bubna, an entrepreneur from Mumbai, is instructive. His software firm, Whats Extra India, raised $100,000 in 2011 at a valuation of $1.5m, then $200,000 in 2014 at $3m. By 2017 it had products and customers but needed fresh capital. A $500,000 fundraising round, this time valuing Whats Extra at $5m, attracted existing investors and some new ones. After that a notice arrived from the tax authority subjecting the earlier rounds to a 33% income tax and penalties equal to 200% of the total money raised. Appealing against the decision required a deposit amounting to 20% of the full amount owed, plus years in court.

NEW INDIA'S
GROWTH ENGINE

Not startups, if the taxman has his way

The process suffocated Mr Bubna's firm, which is now defunct. Not all startups shared its fate: until recently few had problems securing early backing. But the extension of the rules to foreigners, who are believed to account for the lion's share of those early backers, may put many more in peril. Tushar Sachade of PWC, a firm of accountants and consultants, says he has been flooded with inquiries from foreign investors. Indian founders say money pledged by foreigners has evaporated.

India's taxmen are notoriously grasping. They have gone after big multinational firms with retroactive tax bills. A case involving Vodafone, a British telecoms giant, dragged on for eight years before it was settled in 2021. This time Indian business elites are alarmed by the potentially devastating consequences of the new rules for ambitious Indian enterprises.

A WhatsApp group created by Mr Bubna to bring attention to the problem, whose 250 members include grandees of Indian VC, casts the new rules as an existential threat to Indian innovation. Siddarth Pai, a venture capitalist, has called it "a shame of a tax" that will drive entrepreneurs abroad. He and others are calling for the budget, which ordinarily takes effect on April 1st, to be amended. The prime minister, Narendra Modi, talks fondly of India as a "startup nation". He should tell that to his budget-drafters. ■

Internship We invite promising journalists and would-be journalists to apply for an internhip supported by the Marjorie Deane Foundation. Successful candidates will spend three to six months with *The Economist* in London writing about business. Applicants are asked to send a covering letter and an original article of about 500 words that would be suitable for publication in the Business section. Applications should be sent to deaneintern@economist.com by April 1st.

Big tech v the media

Breaking news

Publishers long accused tech firms of taking content. Now they have a point

There was big news in Canada last week—but if you were in Canada itself you may have missed it. On February 22nd it emerged that Google was blocking access to news content, in a five-week trial affecting about 4% of users in the country. The measure comes as Canada's Senate considers a bill that would force big internet companies to pay publishers for displaying links to their stories. Google says it may simply block them instead; Canada's government says the search engine's actions amount to intimidation.

It is the latest episode in a worldwide dispute between new media and old. News organisations, which in the past two decades have seen most of their advertising revenue disappear online, accuse search engines and social networks of profiting from content that is not theirs. Google and Facebook, which have come in for most of the flak, retort that they merely display links and a few lines of text, rather than articles themselves, and that by doing so they drive traffic to publishers (who in any case can opt out if they choose). Facebook estimates that it sends 1.9bn clicks a year to Canadian media, publicity it values at C$230m ($170m).

The online platforms' arguments have mostly fallen on deaf ears. Cheered on by their domestic press, governments in countries including Australia, Britain and Spain have passed or proposed laws aiming to squeeze money out of Silicon Valley and into local media companies. Australia's law, passed in 2021, prodded tech firms to make payments to Australian media reportedly worth about A$200m ($135m) in the scheme's first year.

To ward off similar legislation elsewhere, Google and Facebook have set up mechanisms for funnelling "support" to media companies. Google's "News Showcase" will spend about $1bn in 2020-23 on licensing content from more than 2,000 news organisations in more than 20 countries. Facebook's News Tab (in which *The Economist* has participated) does something similar, but has lately been scaled back. Unlike Google, Facebook can live without news, which makes up only 3% of what users see in their feed.

The laws have sometimes had the feel of a shakedown of the wealthy foreign tech firms by governments. But developments in the search business mean that the publishers' complaints seem increasingly jus- ▸▸

tified. Search engines have been getting better at displaying information without referring visitors to external sources. Ask Google the size of Canada's population and it simply tells you that it was 38m in 2021 (followed by its usual list of suggested websites). About a quarter of desktop Google searches now end with no onward clicks, according to Semrush, an online marketing company.

Artificial intelligence (AI) promises to improve this capability dramatically. Google's AI helper, Bard, is still under wraps. But its rival, incorporated into Microsoft's Bing search engine, is already resolving queries. Ask the old Bing for a summary of Canada's last election results and it points to sites including CBC News and the *Globe and Mail*. Ask the new Bing and it gives a decent account by itself (along with footnoted links to sources). AI assistants can even reach behind paywalls. A user trying to find the *New York Times*'s recipe for macaroni and cheese will be stopped by a demand for payment and subscription. But ask Bing's AI and it serves up a paraphrased version of the whole recipe, complete with a licking-lips emoji.

The search companies admit they are still finding their way with new technology, which is mostly not yet on general release. That is unlikely to satisfy publishers' lawyers. The chief counsel at one large media company argues that AI-search companies should be made to license the content they regurgitate, just as Spotify has to pay record labels to play their songs. AI's use of others' material is "the copyright question of our times", he says. For years the complaints of publishers against platforms have rung somewhat hollow. Now they have a real story on their hands. ■

Bartleby The uses and abuses of hype

How excitement can help and hinder entrepreneurs

Hype and absurdity go together. As excitement about the next big thing builds, people fall over themselves to get on board. A year and a half ago, the metaverse was the future. Companies appointed chief metaverse officers, and futurologists burbled about web 3.0. The idea has not gone away. Colombia held its first court case in the metaverse last month (imagine a video game called Wii Justice and you get the picture). But the excitement has evaporated, at least for now. Microsoft disbanded its industrial metaverse team last month; the career prospects of chief metaverse officers are more virtual than even they would like.

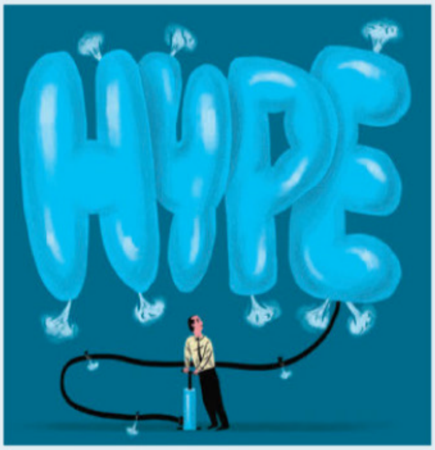
Other technologies have suffered the same reversal. There was a point when it was deeply fashionable to rave about the blockchain, crypto and non-fungible tokens. Now the attention of users, investors and managers is firmly fixed on artificial intelligence (AI). Since ChatGPT, an AI chatbot, was made available to the public at the end of November, it has generated another wave of hype. Over 100m people have asked it to rewrite IKEA furniture instructions in iambic pentameter or something equally vital; venture-capital funds are pouring money into AI startups; established firms are rushing to explain how they will use the technology to do everything from customer service to coding.

Hype need not end in disappointment. Some technologies are less speculative than others; the metaverse is still largely notional, for example, whereas AI is an established field. Even when bubbles burst, they can leave world-changing companies behind. The hype cycle, popularised by Gartner, a consultancy, is real. In essence, it describes a period of uncontrolled enthusiasm for a new idea followed by a backlash.

That makes hype bittersweet for entrepreneurs. Excitement can help unlock funding and attract users. Some think of hype as a public good, vital in enabling new technologies to get going. But it can also lead to problems. The question is how to manage hype for the best.

An obvious temptation for entrepreneurs is to take advantage of the hype by making wild—even deceitful—promises. A paper from 2021 by Paul Momtaz of UCLA Anderson School of Management looked at the once-faddish field of initial coin offerings (ICOs), in which new cryptocurrencies are issued directly to the public. Mr Momtaz found that not only did issuers systematically overplay their tokens' prospects but that investors fell for it. Exaggerated claims raised more money in less time than accurate ones. ICOs are far less hyped these days, but the opportunity to trick investors apparently remains: over 100 new cryptocurrencies have been created that have ChatGPT in their name.

Wilful exaggeration might be a perfectly logical strategy if entrepreneurs are raising money once. But if they want to build a business, tap capital in repeated funding rounds or maintain a close relationship with investors and users, hype might become a liability. Some dangers are obvious: disappointment and damaged credibility if things do not turn out as well as promised. Other dangers are more subtle: being too associated with a specific technology can reduce the room that startups have to pivot to a new product or business model.



So hype calls for care. A recent paper by Danielle Logue of University of Technology Sydney and Matthew Grimes of Judge Business School looked at the different paths taken by a number of social-investment stockmarkets that were set up in 2013 as the buzz over impact investing grew. The authors contrast the glitzier approach of an exchange in London, which attracted high-profile endorsements, promised a financial revolution and subsequently collapsed, with its more successful Canadian peer, which has relied more on expert advice and incrementalism.

The pros and cons of hype have also been apparent in the short public life of ChatGPT. Hype helped make it the fastest-growing consumer technology in history. But the flaws in the technology now attract as much attention. Microsoft, which has integrated a souped-up version of the chatbot into its Bing search engine, has restricted access to the new version and set limits on how many questions users can ask it in a row (an idea well worth adopting in all meetings). As Mr Grimes points out, entrepreneurs who are pushing entirely new products are expected to distort reality without overinflating expectations. How they handle hype can help determine whether they can pull off this difficult balancing act.

Schumpeter | De Novo

Dos and don'ts on how to handle the obesity gold rush

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Paul Ingram, who manages a ranch in rural Texas, is not the type you would normally associate with a weight-loss fad. But a year ago he finally got fed up with lugging his 320lb (145kg) frame around all day in the heat. His family has a history of heart disease. As a result of covid-19, he had become painfully aware of the risks of obesity. His efforts to lose weight through diet and exercise had gone nowhere. "I needed some help."

So his doctor, a family friend, suggested he use an injectable drug from Novo Nordisk, a Danish drugmaker, that is approved for type-2 diabetes but, as a fringe benefit, helps with weight loss, too. To start off, the price, at about $1,000 a month, was out of Mr Ingram's reach. Because he didn't suffer from diabetes, his insurer wouldn't cover it. Then he discovered an online Canadian pharmacy that shipped it to him for $350 a month. Since using it, he has shed 60lb. When he goes to the gym and picks up two 30lb barbells, he thinks, "I used to carry this much more weight around on me all day long." It's life-changing, he reckons—he eats less, exercises more and his doctor is "tickled to death". "It blows me away that insurers don't want to pay for it."

The drug he uses, Ozempic, is now a meme. But it is about more than just "skinny pen" jabs for starlets. In America alone, 110m people like Mr Ingram, many on low incomes, suffer from obesity (see Briefing). They need help getting into shape. Novo Nordisk is their new port of call. It has been a wild ride. Following Ozempic's serendipitous success, the firm's newest potential blockbuster, Wegovy, was the first drug in years that America's Food and Drug Administration (FDA) approved for obesity. This has meant some insurers cover it. For the past two years the company, which turns 100 in 2023, has traded like a growth stock, doubling in value to $326bn on hopes that overlapping diabetes and obesity drugs could become the biggest-selling class of pharmaceuticals ever. It is forecast to divide most of the market with Eli Lilly, an American firm, whose diabetes drug, Mounjaro, may win FDA approval for obesity this year. It is a race like that for the covid-19 vaccine. The combined market capitalisation of Novo Nordisk and Eli Lilly easily eclipses that of AstraZeneca, Moderna and Pfizer put together.

In the eyes of some pundits, Novo has flubbed its lead. It underestimated demand, mishandled supply and let this slow down its ambitions to roll out Wegovy in Europe. Its boss, Lars Jorgensen, admits to some mistakes. But on balance, Novo deserves credit. A hesitant response to an unprecedented surge in demand is not the gravest of shortcomings. In the pandemic many firms, from e-merchants and carmakers to gunsmiths, struggled with demand shocks. Rather than lament Novo's performance, learn from it. Its efforts to tackle obesity provide some golden rules on how to cope in the midst of a boom.

The first thing to remember is knowing your onions. Analysts have long complained that Novo's focus on diabetes-related illnesses make it the least diversified big pharma firm in Europe. But that is orthodoxy gone mad. One of the beauties of the firm, whose founders first made insulin in Denmark in the 1920s, is specialisation. In 1990 Michael Porter, a management guru, called Denmark's insulin-exporting prowess one of its big competitive advantages. That industrial focus gave Novo a head start on obesity. For decades it toiled in the wilderness, while its rivals concluded obesity drugs were neither effective nor safe. But once it discovered that the GLP-1 medicines it used for diabetes, if made longer acting, could lead to at least 15% weight loss, it doubled down. Besides obesity, it hopes to use GLP-1-related drugs to help treat heart disease and other related illnesses. Its success is testimony to the virtue of innovating in adjacent, highly specialised businesses, rather than creating something from scratch.

The second lesson is: know your real market. Novo was at first caught out because demand for obesity drugs spiked far sooner than that for its other drugs typically do, quickly depleting inventories. That deprived some patients of badly needed drugs, as influencers were using TikTok and other social-media apps to pep up demand. This served as a reminder of the dangerous distractions of the hype cycle. So now the firm is going back to basics. It is focusing on customers with a body-mass index (BMI) over 30, like Mr Ingram. It is working with doctors to ensure that they prescribe the drug correctly. And it has set about convincing insurers and health authorities to pay for obesity treatments.

Third, keep control of capacity. As demand surged, one of the filling sites Novo had contracted in Europe malfunctioned. Mr Jorgensen says the situation is improving. It already has two more filling sites coming on stream, and in 2023 it intends to double capital spending for the second year in a row. But it should not overreact. Companies as clever as Amazon learned during the pandemic that excessive faith in a "new normal" leads to overcapacity. Many, including the e-commerce titan, have since shed people and property. The factories in America and Denmark where Novo makes the active ingredients for its medicines take five years to get up and running, at a cost of up to $2.5bn. That gives it a generous head start. Even with the obesity market's huge promise, it is better to advance steadily than to rush.

Skinny pens, fat profits

Last, plan for the long haul. Profits are booming, which delights investors. But many of those who need obesity drugs are unable to afford them. According to a survey by Jefferies, an investment bank, Americans who earn less than $15,000 a year have the highest BMIs. Novo has every right to reap rewards for its innovations. Insurers may cover most of the costs. But to avoid a political backlash, it is important that those who need them most can access them. In order for obesity drugs to extend to other diseases, such as cardiovascular ones, it will be crucial to maintain goodwill. Like diabetes, obesity may be the start of another 100-year business. ■

Finance & economics

The US economy

Bringing down the house

WASHINGTON, DC

America's property market suggests recession is on the way

SPRINGTIME IN AMERICA, which is just around the corner, brings many fine traditions. The crack of the bat on baseball diamonds. Children rolling Easter eggs on the White House lawn. Families putting out dusty, old furniture in yard sales. There is, though, one ritual that towers above all others in its sheer financial importance: spring selling season, when the housing market comes to life—or, on rare occasions, fails to do so. It may be the single biggest determinant of the global economic outlook for the rest of this year, with a recession at one end of the spectrum and the softest of landings at the other.

The importance of American housing resides not so much in its absolute size, big though it is at about $45trn in total value. Rather, it serves as a bellwether of the economy's performance amid rising interest rates. Has the Federal Reserve lifted rates by enough to calm inflation without crushing growth? Has it gone too far? Or, perhaps, not far enough? As one of the earliest and largest sectors to react to changes, the property market offers some answers.

Until the past month, the evidence seemed pretty straightforward. Even before the Fed started jacking up its policy rate, mortgage lenders, anticipating the bank's tightening, had started charging more. From 3% at the end of 2021, the rate on 30-year fixed mortgages surpassed 7% by October, the highest in more than two decades. Lo and behold, activity quickly tailed off. Buyers stayed on the sidelines. Builders scaled back new construction projects. Sellers trimmed prices.

But recently, signs of an early and largely unexpected rebound have emerged, prompting concerns that higher rates are not having the desired effect. New-home sales jumped in January to a ten-month high. Surveys gauging the confidence of both homebuilders and homebuyers have improved. America's property companies have reported more visitors to their show homes. "We have seen the momentum build week after week," notes Sheryl Palmer, chief executive of Taylor Morrison, one of the country's biggest homebuilders.

The case for optimism is that America's property market has found a floor. Buyers are returning but the covid-era frenzy is not. A decent spring season could, in theory, allow prices to stabilise and builders to resume construction, boosting growth without stoking inflation. The case for pessimism rests on the idea that the interaction between the property market and inflationary trends is too powerful to ignore: if buyers return to a supply-constrained housing market, price rises will follow. And if the Fed sees that such a rate-sensitive sector as property is not responding to tighter monetary policy, it may judge that it needs to be more hawkish. Unfortunately for America, and the world, the pessimistic case looks more plausible.

Analysts point to a range of factors behind the rebound. After a year of tepid sales, there is pent-up demand. Richer buyers, paying in cash, represent a larger share of the market. Buyers may also be

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getting used to higher rates: some saw a good deal when mortgage rates fell from north of 7% late last year to 6% in January.

Perhaps most crucially, developers have drawn up a menu of incentives. There is nothing unusual about using discounts when the market falters; the novel element, this time, has been aggressive use of mortgage buydowns through in-house lenders, in effect prepaying some interest on behalf of customers to reduce mortgage rates. This has allowed developers to offer mortgages that seem to emanate from the pre-inflation era of the 2010s. Pulte, a homebuilder, has priced 30-year fixed rates at just 4.25% on some of its nearly complete properties. Toll Brothers, another builder, offers 4.99%. "We learned so much last year on how to address consumer concerns," says Ms Palmer.

These discounts are a clever bit of financial engineering. John Burns, a property consultant, notes that prepaying 6% of a mortgage upfront, and obtaining lower rates for the rest of its life, works out as big a saving for buyers as cutting home prices by 16% but leaving them with higher rates.

The obvious question is whether such discounts are sustainable. There are two potential snags. Homebuyers would struggle to resell their homes at the same price to buyers not benefiting from mortgage buydowns. As a result, Mr Burns thinks that appraisers may cut contracted home values, which would force sellers to lower prices. Second, buydowns fly in the face of what the Fed has been trying to do: tamping down on property purchases to bring demand and supply into better balance.

Last year Jerome Powell, the Fed's chairman, spoke of the need for "a bit of a reset" in the property market. In terms of affordability, this reset has further to run. Mortgage payments on new homes now reach nearly 30% of average household income in America, almost double their average in the 2010s. A rise in incomes, a decline in mortgage rates or a decline in house prices would bring affordability back to pre-covid levels. All three have started to happen, but there is a long way to go. Nationally, home prices have fallen by just 4% since their peak in mid-2022, barely eating into their 45% surge during the pandemic, according to the S&P CoreLogic Case-Shiller index.

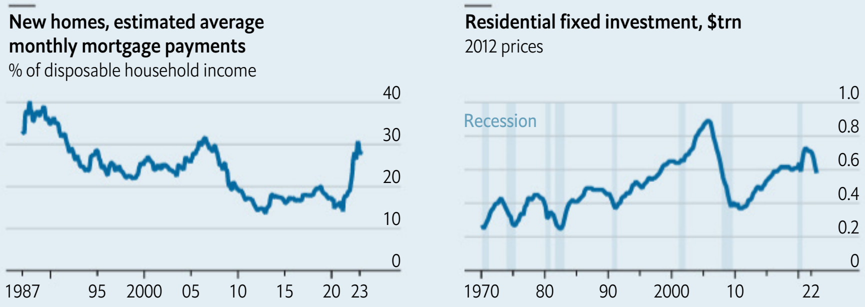
There is also a more inflexible part to the equation: the supply of housing. Homeowners who have locked in low rates are loth to move. There are just 1.1m existing homes on the market for resale, half the average since the late 1980s. Meanwhile, homebuilders are more prudent than they were two decades ago in the lead-up to the global financial crisis. When the covid buying mania got going, housebuilding ticked up but did not soar, since developers saw the boom as ephemeral. Then, when the market softened, they almost immediately scaled back their activity.

This is good for builders' balance-sheets, leaving them with chunky cash positions. But it is bad news for everyone else. Investment in residential construction fell by a fifth in real terms last year. It appears set to fall further this year. Strikingly, despite the nascent rebound in demand, new starts have so far fallen. Dhaval Joshi of BCA Research notes that similar-sized declines in housing investment have almost always presaged recessions in the past. Robert Dietz of the National Association of Home Builders shares this concern: "You've never really had a time where there have been price declines and a significant decline in residential investment, and a recession has not happened."

This runs counter to the hope in financial markets that America can steer clear of a downturn, and counter to the hope in the property market that the worst is already behind it. Firms, economists and investors have learned to be wary of inflation head-fakes over the past two years: short-lived bouts of receding inflation that give way to a reassertion of price pressures. The housing recovery may also prove to be a head-fake, with the sector on a weaker footing than it appears and the Fed compelled to keep rates higher for longer. A lot is riding on the spring selling season. ■

Here we go again

United States



New homes, estimated average monthly mortgage payments
% of disposable household income

Residential fixed investment, $trn
2012 prices

Sources: Bureau of Economic Analysis; Freddie Mac; National Association of Realtors; S&P/Case-Shiller; *The Economist*

Economic warfare

Refined tactics

Russia's sanctions-dodging is getting ever more sophisticated

On February 24th America marked the anniversary of Vladimir Putin's invasion of Ukraine by freezing the assets of a dozen more Russian banks. Britain and the EU also lengthened their blacklists. Part of the reason for tightening sanctions again is to close loopholes in the existing regime: America is going after "evasion-related targets"; Europe vows to punish those "betraying" Ukrainians. As joint research by *The Economist* and SourceMaterial, an investigative outfit, suggests, Russia's sanctions-dodging is only getting more advanced—especially when it comes to flogging the oil that funds Mr Putin's war.

A month ago Europe imposed an import ban on refined Russian oil, having already banned purchases of the country's crude. To keep global supply flowing while limiting Mr Putin's revenues, the EU allows its shippers, insurers and banks to continue facilitating Russian exports to other countries so long as the oil is sold below a price set by the G7 group of big economies. But Russia's petroleum has not become as much of a bargain as hoped. Most countries outside the West have not introduced their own sanctions, allowing the rise of an army of shady middlemen beyond the reach of Western measures. Our investigation sheds light on a missing piece of the puzzle: how their trade is financed.

Take Bellatrix, a once-unknown trader which shipping data suggest now controls seven tankers capable of carrying 3m barrels. The firm did not respond to our questions, but a tax-return filing in Hong Kong, where it is domiciled, shows its ownership was transferred to Bilal Aliyev, an Azeri citizen, six weeks into the war. Data suggest it has been involved in at least 22 trades of Russian oil products since January 1st. On all but three occasions it bought barrels from Rosneft, Russia's state-owned oil giant. Where did it find the money?

A paper trail provides clues. A filing in Hong Kong shows that the Russian Agricultural Bank, a state-owned lender, approved a loan facility of up to $350m to Bellatrix on December 30th, to be repaid by May 2025. This is despite Viktoria Abramchenko, Russia's deputy prime minister, saying on December 22nd that sanctions should be removed from the bank to ease food supplies, adding that "we, for our part, guarantee that only food, only mineral fertilisers will be the goods that go through this bank". Another filing, dated

December 27th, shows Bellatrix signing up to a loan facility with the Russian Regional Development Bank, a Rosneft subsidiary.

Until recently it seemed a good chunk of Russia's oil exports were financed on open credit by the Russian government, with traders paying for the goods once they had collected the proceeds themselves. Our findings suggest the trade is becoming more institutionalised. Many obscure traders appear to be tapping Russian banks on behalf of buyers further down the chain. Bellatrix itself seems to have a close business relationship with Coral Energy, a trader based in Dubai and owned by another Azeri businessman. A filing dated December 28th states that Bellatrix has a prepayment and offtake agreement with the Nayara refinery in India (49% owned by Rosneft) that it has assigned to Coral.

Can the West do much to stem the stream of grey finance? Some interpret America's decision to blacklist MTS, a Russian bank, just days after Abu Dhabi granted it a licence, as a signal that it could soon apply more pressure. But Russian fuel remains in high demand. Imports by China's independent refiners jumped by 180% last month. Heavy-fuel shipments to Fujairah, a port in the UAE, are breaking records thanks to surging Russian exports.

Some of the Russian crude is even finding its way back to Europe once refined. Global Witness, an advocacy group, alleges that Western energy companies and traders, such as Shell and Vitol, are shipping some to the bloc, often from Turkey. The firms have rightly said that such trades are not illegal. Our investigation suggests that, earlier in the supply chain, the mechanics of the Russian oil trade are increasingly being greased by the Kremlin's money. ■

Buttonwood Shun woke, go broke

The anti-ESG industry is taking investors for a ride

UNTIL RECENTLY, there were two iron laws in investing. One, popularised by Milton Friedman, a Nobel-prize-winning economist, posited that a company's responsibility above all else was to provide returns to its shareholders. The second, promoted by Jack Bogle, founder of Vanguard, an investment firm, held that asset-management fees must be driven to the lowest level possible.

The growing importance of environmental, social and governance (ESG) criteria has weakened Friedman's doctrine of shareholder primacy, perhaps fatally. Global ESG funds manage $7.7trn in assets, having doubled in size in the past seven years. Even the Business Roundtable, a talking shop for American bosses, declared in 2019 that companies must place the interests of a variety of clients, customers and communities on equal footing with shareholders.

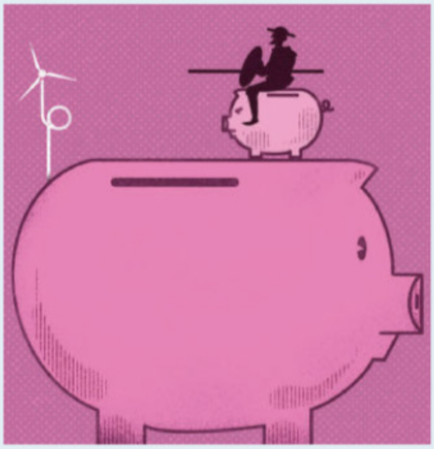
But like all revolutions, this one has generated a reaction. The anti-ESG backlash is flourishing. Vivek Ramaswamy, author of "Woke, Inc." and co-founder of Strive Asset Management, announced his candidacy for the Republican presidential nomination on February 21st. The firm he left to pursue his political ambitions promotes exchange-traded funds (ETFs) and proxy-voting services that push back against what it sees as the politicisation of corporate governance.

Anti-ESG legislation is also rippling through American state legislatures. In February Ron DeSantis, Florida's governor, who is also expected to compete in the Republican primaries, proposed legislation to prohibit the use of ESG criteria in all of the state's investment decisions. Given the supervisory role many statehouses hold over public pension funds, many of which have hundreds of billions of dollars in assets, this sort of legislation could have big implications for the asset-management industry.

There are plenty of problems with the ESG movement. Working out if assets are ESG-compliant is complex, and prone to bias, mismeasurement and public-relations peacocking. Proponents of feel-good investing want to have their cake and eat it, insisting that the focus on stakeholders is actually better for shareholders, too.

But in defending Friedman's law, the anti-ESG crowd is struggling with the other part of the investing canon—the importance of low fees. At the moment, taking a position against ESG is much more expensive than going with the crowd. This is particularly true when it comes to anti-ESG laws, which are more preoccupied with bashing ESG-promoting firms than with prioritising shareholder returns and cutting costs for taxpayers.

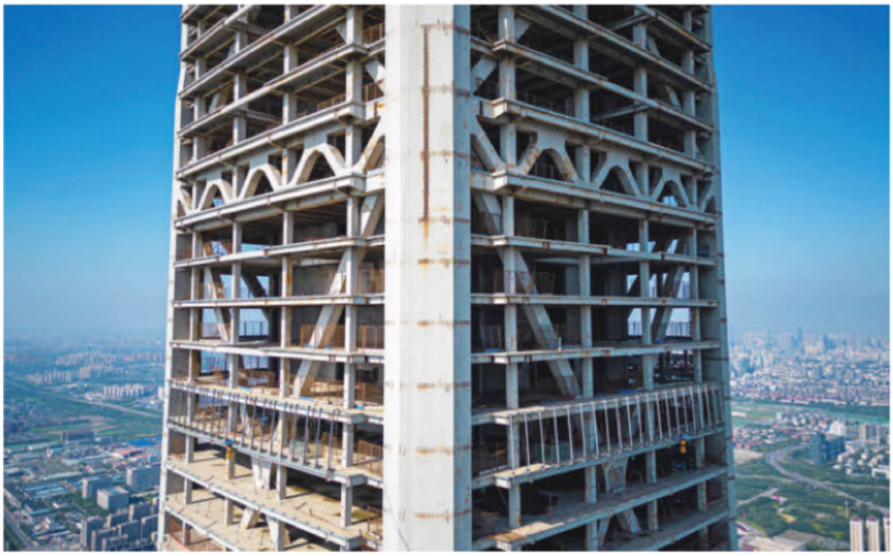
A study by Daniel Garrett of the University of Pennsylvania and Ivan Ivanov of the Federal Reserve Bank of Chicago considers one anti-ESG stance. It finds that Texas's anti-ESG laws, which had the unfortunate side-effect of thinning out the number of bond underwriters, raised issuers' interest costs by $300m-500m in their first eight months. Meanwhile, Indiana's anti-ESG bill was watered down after the state's fiscal watchdog suggested that it would cut annual returns to the state's public pension funds by 1.2 percentage points, because it would prevent the use of many active managers and limit investment in the private-equity industry and thus private markets.



Similarly, the cost of anti-ESG ETFs is considerable, and their benefits questionable. Strive's most popular ETF, DRLL, focuses on the American energy industry. But the fund charges fees of 0.4% a year on assets, compared with 0.1% for XLE, the largest regular energy ETF, created by State Street Global Advisors, another investment firm. This amounts to a big drain on a buyer's compounded returns. Moreover, the top ten holdings in both funds are the same.

Any success that Strive achieves in changing corporate governance and raising returns will be enjoyed by holders of other energy funds as well. Therefore an anti-woke investor may be best advised to stick with lower-fee funds and wait to see whether the efforts of anti-ESG activists amount to anything. It could be a long wait: it is difficult to see exactly how anti-ESG offerings will expand their audience beyond the most committed fellow travellers.

For a hard-headed investor who still believes in Friedman's doctrine, the anti-ESG movement would hold an obvious appeal were it to become less costly. But at the moment there is only one rational choice. Investors, and taxpayers, are far better placed when they follow the crowd. That means coming to terms with Woke, Inc., rather than paying hefty sums to push back against it.



Economic risks

A vertiginous view

TIANJIN

China's cities are on the verge of a debt crisis

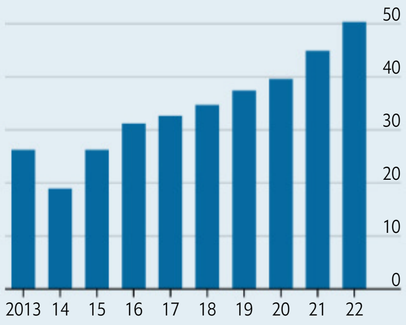
FROM SEVERAL kilometres away China 117 Tower, the world's sixth-tallest skyscraper, is an extraordinary sight—rivalling anything Dubai, Hong Kong or New York has to offer. On closer inspection, however, the building in Tianjin is revealed to be an eyesore of epic proportions. Construction on "117", as locals call it, was never completed. Large sections remain unfinished; patches of the tower's concrete skeleton are exposed to the outside world. Instead of becoming a magnet for business and wealth, it has been repelling prosperity for years. Other derelict towers surround the building, forming a graveyard of a central business district. Local officials would hide the entire area if they could.

Tales of extravagantly wasteful spending have circulated in China for years, as cities and provinces accumulated debts to build infrastructure and boost the country's GDP. These debts have reached extraordinary levels—and the bill is now arriving. Borrowing often sits in local-government-financing vehicles (LGFVs), firms set up by officials to dodge rules which restrict their ability to borrow. These entities' outstanding bonds reached 13.6trn yuan ($2trn), or about 40% of China's corporate-bond market, at the end of last year. Lending through opaque, unofficial channels means that, in reality, debts are considerably higher. An estimate in 2020 suggested a figure of nearly 50trn yuan.

Borrowing on this scale appeared unsustainable even during China's era of rapid growth. But disastrous policymaking has pushed local governments to the brink, and after the rush of reopening the long-term outlook for Chinese growth is lower. The country's zero-covid policy hurt consumption, cut factory output and forced cities and provinces to spend hundreds of billions of yuan on testing and quarantine facilities. Meanwhile, a property crisis last year led to a 50% fall in land sales, on which local governments rely for revenue. Although both problems are now easing—with zero-covid abandoned and property rules loosened—a disastrous chain of events may have been set in motion. About a third of local authorities are struggling to make payments on debts, according to a recent survey. The distress threatens government services, and is already provoking protests. Defaults could bring chaos to China's bond markets.

Local bonds, national problem

China, unrated LGFV* bonds, % of total



Sources: CGS-CIMB; Wind *Local-government-financing vehicle

To make ends meet, local governments have entered costlier and murkier corners of the market. More than half of outstanding LGFV bonds are now unrated, the highest share since 2013, according to Michael Chang of CGS-CIMB, a broker. Many LGFVs can no longer issue bonds in China's domestic market or refinance maturing ones. Payouts on bonds exceeded money brought in from new issuances in the final three months of 2022, for the first time in four years. To avoid defaults many are now looking to informal channels of borrowing—often referred to as "hidden debt" because it is difficult for auditors to work out just how much is owed. Interest on these debts is much higher and repayment terms shorter than those in the bond market. Other officials have gone offshore. LGFVs last year issued a record $39.5bn in dollar-denominated bonds, on which many are now paying coupons of more than 7%.

These higher rates have the makings of a crisis. A report by Allen Feng and Logan Wright of Rhodium, a research firm, estimates that 109 local governments out of 319 surveyed are struggling to pay interest on debts, let alone pay down principals. For this group of local authorities, interest accounts for at least 10% of spending, a dangerously high level. In Tianjin, the figure is 30%. The city on China's prosperous east coast, home to 14m people, is a leading candidate to be the default that kicks off a market panic. Although Tianjin neighbours Beijing, its financial situation is akin to places in far-flung western and south-western provinces. At least 1.7m people have left the city since 2019, a scale of outflows that resembles those from rust-belt provinces. Dismal income from land sales can only cover about 20% of the city's short-term LGFV liabilities.

Across China, pressure on local budgets is starting to be felt. On February 23rd a private bus company in the city of Shangqiu, in Henan province, said it would suspend services owing to a lack of government financial support. Several others elsewhere have said the same. Cuts to health-care benefits have prompted protests in cities including Dalian and Wuhan, where they were met with a heavy police presence. Local governments have struggled to pay private firms for covid-related bills such as testing equipment. In places, they are also failing to pay migrant workers, which has led to more protests.

Some local governments have started to sell assets to try to avoid defaults. A recent loosening of rules on stock exchanges could help localities raise capital from the public through listings. Governments could also start hocking assets in private transactions. It is unclear, though, how far

▸▸

officials are willing to go, or who will buy the assets on offer. A new business district in Tianjin appears to have many of the hallmarks of success, for instance—not least several rows of sparkling new towers and a Porsche dealership across the street. But most of the shops on the ground floor of the project, which is jointly owned by a local-government company and a private firm, are empty. Local officials have started to auction off individual floors. One such sale recently ended without a buyer.

The central government is transferring funds to localities on a grander scale than ever before. More than 30trn yuan was made available between 2020 and 2022, according to Messrs Feng and Wright. An LGFV in the city of Zunyi, in the indebted south-western province of Guizhou, recently agreed with local banks to lower rates, defer principal payments for ten years and extend the maturity of its debt to 20 years. Such arrangements could become more common in future. Proponents argue they indicate a genuine willingness on the part of local officials to pay their debts, and are an acknowledgment that it will simply take more time than expected.

But ever-growing debt over the past decade suggests that many projects will never become truly profitable, says Jack Yuan of Moody's, a ratings agency. The troubled LGFV in Zunyi, for instance, has had negative cashflows since 2016, and seems to have little hope of a turnaround. As Rhodium's analysts ask, if these governments could not make payments when local GDP growth was high, often above 7%, how will they manage in the forthcoming decade, with growth of perhaps 3%? ■

Poverty reduction

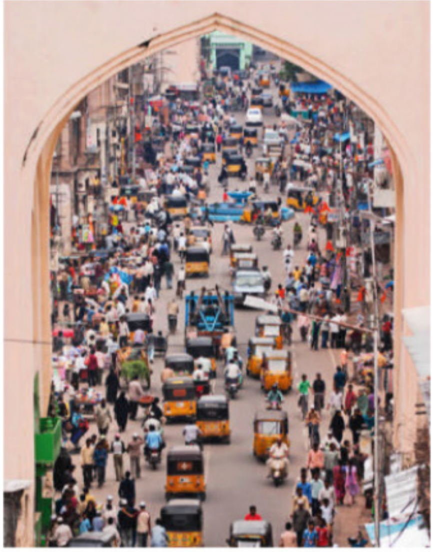
Two-speed transmission

DELHI AND MUMBAI

What vehicle sales reveal about India's growth

IN A LAND where labour is cheap, the man who drives the most luxury cars is not a billionaire. He is a parking attendant. On a meagre salary, he must park, double-park and triple-park cars in tight spaces, and then extricate them. In India, where car sales have increased by 16% since the start of the covid-19 pandemic—a trend partly driven by the growing popularity of hefty sports-utility vehicles—this tricky job is becoming even more difficult.

To many, India's automobile boom symbolises the country's superfast economic rise. On February 28th new figures revealed that India's GDP grew by 4.4% year on year in the last quarter of 2022, down from 6.3% in the previous quarter. Despite the slowdown, the IMF expects India to be the fastest-growing major economy in 2023, and to account for 15% of global growth. The governing Bharatiya Janata Party (BJP) believes the country is in the midst of *Amrit Kaal*, an auspicious period that will bring prosperity to all Indians.



Life in the slow lane

Not everyone is convinced by the BJP's boosterism. To sceptics, rising vehicle sales in fact demonstrate the unsavoury lopsidedness of India's economic growth. Indeed, purchases of two-wheelers, such as scooters and motorcycles, have sputtered since covid hit, and are down by 15% since 2019. These are the vehicles of the masses: half of households own a two-wheeler; fewer than one in ten own a car.

Not many questions are more central to Indian politics than the wellbeing of the country's everyman. The problem is that answering the question is fraught with difficulty. Official statistics are patchy. Ministers have not published a poverty estimate in more than a decade. Thus assessments and inferences must be made using other surveys and data sets, such as vehicle sales.

These suggest poverty reduction has stalled, and maybe even reversed. According to a survey of 44,000 households by the Centre for Monitoring Indian Economy (CMIE), a research outfit, only 6% of India's poorest households—those bringing in less than 100,000 rupees ($1,200) a year—believe their families are better off than a year ago. The recovery from the pandemic, when harsh lockdowns whacked the economy, has been horribly slow.

The World Bank estimates shutdowns pushed 56m Indians into extreme poverty. Since then inflation has further eroded purchasing power: real wages in rural areas, where most of the poor live, have stagnated, and annual inflation jumped to 6.5% in January. Poor families, for whom food makes up 60% of household expenditure, have felt the strongest pinch. Rural food costs have risen by 28% since 2019; onion prices by an eye-watering 51%.

Labour-market data also bely India's impressive headline growth figures. Take-up for a rural-employment programme, which guarantees low-wage work to participants, remains above pre-covid levels. CMIE surveys suggest the unemployment rate is also higher, averaging more than 7% over the past two years. Many people have given up looking: labour-force participation rates have fallen since the pandemic.

There are plenty of problems with India's economy, from poor primary education to an inability to grow its limited manufacturing sector. But these were present even as previous growth spurts lifted millions out of poverty. Recent pains are thus more likely to reflect the pandemic's after-effects. Construction firms in cities, for example, complain of labour shortages, as many workers who headed to villages during lockdowns have not yet returned.

These may at last be starting to ease. The latest data releases suggest that rural wages may be picking up. Deposits in bank accounts set up for the poor are also rising. Even sales of two-wheelers are slowly creeping up. A lot more improvement will be needed, however, for claims of *Amrit Kaal* to ring true. ■

The A to Z of economics

From absolute advantage and money illusion to zero-sum games, our relaunched economics glossary defines the terms that matter. Find it at:
economist.com/economics-a-to-z

Investment banking

Out of focus

NEW YORK

Goldman Sachs lacks answers for its disgruntled investors

“I KNOW THAT everybody wants answers on this,” said David Solomon, boss of Goldman Sachs, as he grew visibly exasperated by yet another query about the bank’s plans for its “platform-solutions business”, home of its consumer-lending arm, which in 2022 lost $1.7bn. “But I can’t answer that question.” The investor then tried flattery: “Goldman Sachs is world class at risk management…when you make a bad trade you get out of it,” he began, before asking what more the bank could do to reduce losses in platform solutions. “Thank you for the compliment,” replied Mr Solomon, before turning his back, walking away and moving on to the next question. The auditorium, filled with shareholders, analysts and media attending the firm’s investor day at its headquarters on February 28th, stiffened.

The tense exchange reflects frustration inside Goldman. Mr Solomon can point to some success. Since he took over in 2018 the company has posted an annualised total return to shareholders of 13%—better than the overall market and almost all of its competitors, apart from Morgan Stanley, its major rival, which managed to return 21% over the same period.

Mr Solomon argues that this success is because the firm has followed through on promises made at its first-ever investor day three years ago, such as growing market share in investment banking, and beefing up assets under management. From this view, the critics’ obsession with losses in platform solutions, which remains a tiny part of the firm, is unmerited.

Yet the skirmish was also a sign of investors’ frustrations. Although Goldman’s core businesses have done well, it has been such a strange time for capital markets that it is hard to tell how much of the success can be replicated. The firm has struggled to lower the value of investments it makes using its own balance-sheet, which cause wild swings in earnings. Platform solutions may be a small part of the business, but costs are piling up. Losses doubled from 2021 to 2022, shaving two percentage points off returns on equity last year.

At its investor day Goldman tried to reassure shareholders. This included a mea culpa from Mr Solomon, who said Goldman did “too much too fast” and grew into areas where it “did not have a competitive advantage”. Fresh promises were also made. Stephanie Cohen, head of platform solutions, said scale would help the business reach profitability by 2025. Mr Solomon teased a sale, saying Goldman was exploring “strategic alternatives”. Later Bloomberg reported that the firm might sell GreenSky, a home-improvements lender it acquired only a year ago. These mixed messages—vowing to grow the business and get rid of parts of it—seem to have confused investors. The share price sagged. On a day when the S&P 500 index of large American firms shed just 0.3%, shares in Goldman fell by nearly 4%.

Behind Mr Solomon, as he answered investor queries, a screen displayed the firm’s slogan for the day, a syntactically awkward “focused on the forward”. The message investors sent back: not yet. ■

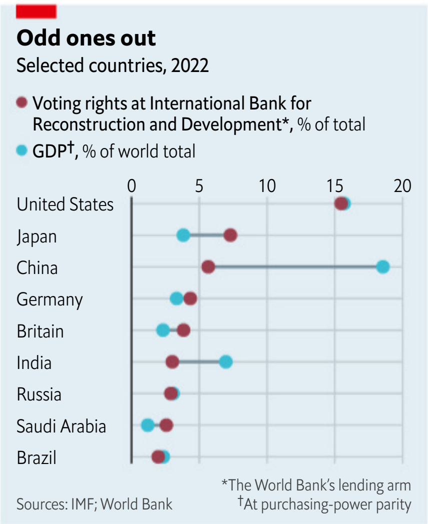
International finance

Banking on it

Ajay Banga may be just what the fractious World Bank requires

ON FEBRUARY 23RD, a week after David Malpass announced his resignation as president of the World Bank, and mere hours after the bank said the search for a successor would be months-long, “open, merit-based and transparent”, everyone knew who would win. Ajay Banga, a former boss of Mastercard, was nominated by the White House, making him the lender’s leader-in-waiting. A naturalised American who was, in his words, “made in India”, and a private-sector businessman, Mr Banga represents a break from tradition.

Emerging economies did not, however, take his nomination as a victory. The White House has chosen every World Bank president since it struck a gentlemen’s agreement with Europe, which gets to pick the IMF’s boss, in 1944. America also holds an outsized share of votes at the bank. This made sense after the second world war. Now countries from China to Panama want their growing presence in the world economy reflected in its institutions.


Odd ones out

Selected countries, 2022

● Voting rights at International Bank for Reconstruction and Development*, % of total

● GDP†, % of world total

Sources: IMF; World Bank

*The World Bank’s lending arm
†At purchasing-power parity

Mr Banga’s first task will be to tackle infighting. The same tensions are spilling into disputes about the bank’s role. America and Europe want it to lend more, with looser constraints, to alleviate the burden of rising interest rates, climate change and reduced Chinese lending to poor countries. But some emerging economies are pushing back, saying such a move would risk the organisation’s ultra-safe AAA credit rating. Without extra capital, the bank has gaping holes in its coverage. Its officials have been quiet on Ukraine’s reconstruction, and struggled to pump as much as regional outfits into green infrastructure.

Another fight is about debt relief, which China has brought to a standstill by insisting the World Bank takes write-downs on its loans. Mr Malpass has so far stood his ground, countering that this would impair the bank’s ability to lend. A more antagonistic China lowers the chances that American policymakers will consent to giving Beijing more votes any time soon.

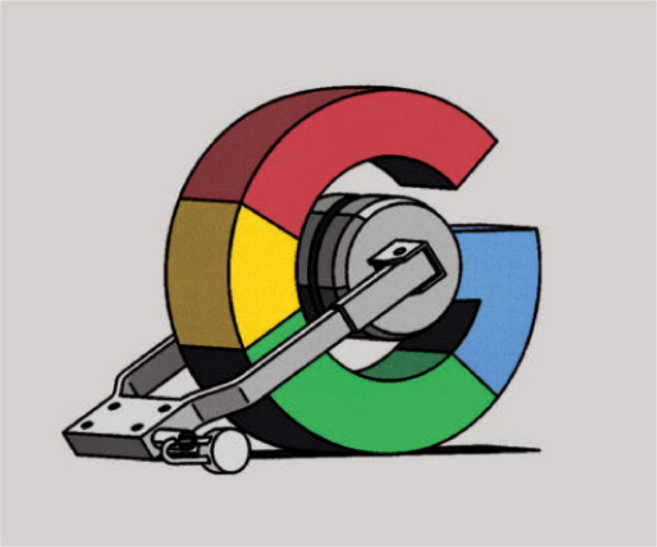
Some doubt Mr Banga (who is on the board of Exor, which owns a stake in *The Economist*‘s parent company) is capable of the bureaucratic manoeuvres needed to break the deadlock. He will be the first appointee with no full-time experience in development or government since James Wolfensohn, a banker and lawyer, in 1995. But Mr Banga’s career could be an asset. After more than a decade on Wall Street, he oversaw the rise of Mastercard from a credit-card firm worth $20bn in 2009 to a payment platform worth $300bn. He is well placed to guide work on digital payments, a priority at the bank. And he has a reputation for transforming unwieldy organisations into slicker outfits.

Mr Banga may also help the bank at long last embrace a green agenda. In September Mr Malpass dodged a question about fossil fuels and global warming, saying he was “not a scientist”. In January Western countries rejected the bank’s climate plan for being insufficiently ambitious. By contrast, at Mastercard Mr Banga wrote supergreen blogs. The hope is that he will use his Wall Street know-how to get firms to funnel cash to green tech and infrastructure.

America’s ideal World Bank is a well-oiled machine with a sustainable bent, much like the Mastercard that Mr Banga left behind. Before he repeats the trick, the new president will have to first stop routine infighting by getting emerging economies on side. To do that, he will have to make them forget the less-than-equitable circumstances of his selection. ■

Free exchange | In search of a problem

The current era of trustbuster activism is based on a misapprehension



In 1912 America's Supreme Court ruled that a coalition of 14 railroad proprietors had used their joint ownership of a bridge across the Mississippi river, near the St Louis terminal, to unlawfully stifle competition. The crossing gave the railroad trust a chokehold over traffic to and from the city's main terminal. St Louis was an important railway hub. In the court's opinion, the monopoly power over the railway bridge was therefore a means to foreclose the business of rival rail operators across America.

More than a century later, American trustbusters are preparing for battle with another giant in a network industry. In January the Department of Justice (DOJ) set out a 155-page complaint against Google for monopolising digital advertising on exchanges. It alleges that Google used strong-arm tactics to lock up the ad-tech business. The case is billed as the biggest antitrust challenge to tech since the DOJ's epic battle with Microsoft in the late 1990s.

Central to the case is the acquisition by Google in 2008 of DoubleClick, which had developed a lead in the marketing of digital-advertising space. It has become almost an article of faith among regulators that the Federal Trade Commission (FTC) should have blocked the merger. As if to compensate for this laxity, trustbusters have recently sought to block many tech mergers, including Microsoft's purchase of Activision Blizzard, a video-game maker. The DOJ is seeking to break up Google's ad-tech business—in effect, undoing the DoubleClick merger. It is far from clear, however, that allowing this merger was actually a mistake.

To understand why, start with a stylised view of Google's ad-tech "stack". The middle layer is Google's Ad Exchange, which matches buyers and sellers of advertising space (or "inventory"). On one side of the market are website publishers who want to sell ad space. They submit sales requests via a digital tool. The antecedent of Google's sell-side software is DoubleClick for Publishers, acquired in the merger. On the other side of the exchange are ad buyers, who have two routes to the market. Agencies and large ad buyers use demand-side platforms to bid for inventory. Smaller advertisers go directly to Ad Exchange. Google's share of traffic varies between 40% and over 90%, depending on the stage of the journey. Bids and offers are matched by complex algorithms in the instant between a click on a website and a display ad appearing.

In a case such as this, the best initial question is a straightforward one: where is the choke point? Microsoft was accused of tying Windows, the dominant operating system for desktop computers, to Internet Explorer in a manner that sought to exclude Netscape and others from the market for web browsers. Windows was the choke point, just as the bridge to St Louis was in the railroad case. The charge against Google is more complex, or at least the story is one that is harder to tell. The locus of monopoly, in the DOJ's telling, seems to shift. First it lies with Google's power on the demand side of digital advertising, through its adjacent strength in search ads. At other times, it is the company's hold on the supply side, bolstered when it bought DoubleClick. At still other times, the locus of market power is the exchange. This shape-shifting may simply be how foreclosure works in digital markets. The DOJ's trustbusters are certainly eager to present Google's end-to-end presence in the ad-tech stack as inherently sinister.

But is it? The profitability of the ad-tech stack might reflect the fact it is more efficient under a single roof. The integration of publisher ad server, exchange and demand-side platforms is likely to make for a smoother flow of data, better matches between buyers and sellers and a more streamlined experience. And there are "network externalities" to consider. Ad tech brings together distinct groups (advertisers, publishers and consumers). Each sort of customer benefits the more custom there is from the other sorts: advertisers want access to a broad range of inventory; publishers want lots of bidders for their display space; and so on. In similar kinds of networks, it is common for one enterprise to cater to all sides of the exchange. Think of payment systems, which have a business relationship with credit-card users as well as merchants.

Implicit in the DOJ case is the idea that the only route to a large part of the consumer market goes through Google. Trustbusters like to define markets narrowly. The smaller the market, the larger the leading firms loom in it. For their part, businesses like to claim that good substitutes for their products are everywhere: Netflix's boss once claimed the firm's main competitor was "sleep". It seems fair to say that "open-web display advertising sold via exchanges" is a distinct industry, because it has its own unique production technology. It is less obvious that it is a market which is truly separate from digital advertising or plain old advertising.

Back to the future

Nor is it obvious the FTC was lax in permitting the DoubleClick purchase. After all, the European Commission—no friend to American tech—allowed it after an in-depth investigation. Perhaps, however, there was a better option available, says William Kovacic, an FTC commissioner at the time of the merger and now a law professor at George Washington University. Instead of suing in court to block the merger and (probably) losing, the agency could have pursued an internal-administrative trial. This would have afforded officials an opportunity to learn about tech and update their practices, says Mr Kovacic. It might have allowed for remedies, short of unwinding the merger, to put Google on watch. The charge of "antitrust under-enforcement", which has fuelled today's over-active merger control, might not have taken hold.

This is hardly water under the bridge. An epic court battle is now in prospect. It may seem strange that this corner of the advertising business—almost a side-hustle for Google—will be the locus for it. But antitrust cases often hinge on obscure details or arguments. It is no stranger, after all, than a Supreme Court ruling that turned on the use of a railway terminal in St Louis. ■

Electric cars

Their dark materials

Firms are scouring the world for cleaner supplies of graphite for EV batteries

Despite probable bumps in the road ahead, caused by faltering economies and component shortages, more than 13m plug-in fully electric or hybrid passenger cars are likely to be sold this year, according to BloombergNEF. This will take the number of EVs on the world's roads from 27m to more than 40m. But that is still only around 3% of the planet's vehicle fleet. With another 97% to go, mass electrification of transport means there will be a huge demand for batteries and the materials they are made from.

Carmakers already fret about spiralling prices and limited supplies of lithium, the crucial ingredient of the lithium-ion batteries at the heart of this revolution. They also worry about cobalt and other ingredients used to make cathodes, the positive electrodes inside those batteries (though recent discoveries of new reserves have dampened those concerns as they relate to cobalt in particular). It does, though, take two to tango. For every cathode, a battery needs an anode, a negative electrode. Anodes are made from graphite, and a supply-shock for that material is brewing.

Graphite is a form of carbon in which the atoms are arranged in sheets. Among other things, it is the stuff used as the "lead" in pencils—hardly the highest of tech applications. As such, anodes have been seen as a bit boring compared with cathodes, with a plentiful supply of raw material from which they can be made. But, driven by growing EV sales, demand for graphite is set to triple from 1.2m tonnes in 2022 to more than 4m tonnes a year by 2030, according to Benchmark Mineral Intelligence, a firm of analysts in London. At the moment, supply is growing at only about two-thirds that rate. So there may not be enough graphite to go round, especially as this material has other big users, such as the steel industry.

Graphite used in batteries comes in two forms, both of which have pros and cons. One is natural, dug from the ground—though the mines that produce the best grades are few and far between. The other is synthetic, coming from the roasting of so-called needle coke, a by-product created in some coal-processing and petrochemical plants. This roasting is an energy-intensive process that results in high levels of emissions. At the moment, most graphite for anodes is made in this way, but carmakers worried about their green credentials are expected, increasingly, to seek out the cleaner, mineral variety, says Andrew Miller of Benchmark.

Digging deeper

Whatever its provenance, graphite has to be purified to a level of 99.95% or better—for the slightest impurity interferes with the flow into and out of it of lithium ions. When a battery is being charged, these ions are created at the cathode by stripping electrons from lithium atoms. The electrons are sent towards the anode through an external circuit, and the ions likewise dispatched in that direction via an electrolyte inside the battery. When they reach the anode, these ions are united with electrons supplied by the external circuit and lithi-

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um atoms are thus re-formed. Those are then squirrelled away in the graphite's atomic layers until such time as the battery is called on to supply power. The process then reverses, but with the electrons in the external circuit powering a device, such as an EV's electric motor.

So far, graphite remains the best material available for anodes. But purifying it is a messy business. Conventionally, highly corrosive chemicals, such as hydrofluoric acid, are used to dissolve impurities. Most of this processing is done in China. Carmakers have been nervous enough about that country's grip on some 60% of the world's lithium. But, when it comes to graphite, China commands more than 90% of the supply chain.

All of these things have led a number of companies to start seeking to diversify their supplies by opening graphite mines and processing plants elsewhere, particularly in America and Europe. As those operations are often in places that impose tough environmental restrictions on industry, cleaner methods are needed. Though firms are wary about divulging trade secrets, the approaches they are devising should help clean up the industry.

Black gold

One of Europe's first battery-anode plants, in Lulea, northern Sweden, has already begun supplying carmakers with production samples. This factory, owned by Talga, a firm in Perth, Australia, is fed by a graphite mine the company has developed near Vittangi, 300km yet farther north. The Vittangi mine produces some of the world's highest-grade graphite, meaning less waste material is generated. The environmental impact can therefore be kept small, says Mark Thompson, Talga's boss.

The Lulea plant uses a process called low-temperature alkali-roasting to release impurities from graphite's crystal structure. These are then washed away with acids milder than hydrofluoric. Mr Thompson says this produces less waste than conventional approaches. For bonus green points, the factory is powered by Sweden's extensive supply of renewable hydroelectricity. The firm points to an independent analysis which finds the combination produces 96% less greenhouse-gas emissions than making synthetic graphite. Nevertheless, Talga is working on proprietary processes to make production greener still.

As is usual in the industry, once graphite is purified it is turned into tiny spheres that form a fine black powder, before being shipped to battery-makers. Their shape allows these particles to be packed efficiently into an anode, increasing contact between them, and thus overall conductivity. Anode-making itself is done by turning the graphite into a slurry and then coating it onto strips of copper film.

Talga hopes its Swedish operation will produce more than 100,000 tonnes of anode graphite a year. Depending on the size and performance-characteristics of an EV, its battery pack could contain some 70-90kg of graphite. The company's annual output could therefore be used to power more than 1m new vehicles.

On the other side of the world, Anthony Huston, founder of Graphite One, a firm in Vancouver, Canada, is trying something similar. His firm is carrying out exploratory mining at the appropriately named Graphite Creek, near Nome, in western Alaska (samples from which are shown in the picture on the previous page). This is estimated to contain more than 8m tonnes of the stuff, the largest deposit in the United States—a country which has, since the 1950s, imported all its graphite.

The idea, says Mr Huston, is to ship the graphite south to a processing plant that would be built at a yet-to-be determined site in Washington state. Here it would be purified and processed, also using renewable power. Graphite One is working with Sunrise New Energy, a Chinese anode-materials company in Zibo, Shandong province, on a purification system that would gently heat the graphite in the presence of recyclable cleaning gases.

Nico Cuevas, boss of a firm called Urbix, is looking at an altogether different way to process graphite. Urbix has built a demonstration plant at its base in Mesa, Arizona. This is understood to use heat and mechanical means to excite graphite flakes in such a way that the layers of carbon within open up, allowing impurities to be washed away with less-harmful chemicals.

The Urbix method is a low-energy process clean enough to be carried out on a site zoned for light industrial use, says Mr Cuevas. The firm will use graphite from potential sources within North America, and has signed a joint development deal with SK On, a South Korean battery giant. SK On already has two battery gigafactories in America, and has formed a joint venture with Ford to build three more.

Researchers are developing anodes that use other materials. Silicon and lithium-metal anodes are theoretically more efficient at storing energy, but both come with problems. Silicon, in particular, swells and contracts with charging and discharging, which could damage a battery. However, small doses of such material can be blended into graphite to boost its performance. Urbix says its process allows such substances to be incorporated within the core of its graphite spheres.

Another possibility is to use a different type of carbon. Stora Enso, a Finnish forest-products company, reckons it can make anode material from lignin. This is a natural polymer that gives wood its stiffness, but it is treated as a waste product when wood is processed into paper. Normally, it is burnt to generate heat. Stora Enso plans to refine it into a carbon powder.

Stora Enso will not go into details about how they do this, other than to say their process involves several heat and mechanical treatments which take place at lower temperatures than those conventionally employed to produce synthetic graphite. Northvolt, a Swedish battery-maker, is looking at using the firm's material.

Alternatives to graphite will, no doubt, continue to progress. But with such huge investment going into gigafactories—almost $300bn over the past four years, according to Benchmark, and most of that based on a familiarity with the existing material—graphite looks like holding its own for some time to come. With new, low-impact mines and cleaner processes, the dark side of the electric car should soon become a bit greener. ■

The origins of wine

Of vino, veritas

The origin of grapevines is a tangled vine itself

According to the Bible, Noah was the first man to make wine. He was also, not unrelatedly, the first man to drink to excess, be found naked in his own vineyard, and wake up with a hangover. But, certain colourful details aside, this legend of the most premier of crus is not too far off the standard picture of the birth of viticulture: a single domestication that happened thousands of years in the past.

But how many thousands? Most domestications of Old World crops and animals are thought to have taken place during a

...and he planted a vineyard

white-hot period of innovation between 15,000 and 10,000 years ago. Grapes were a notable exception. Small-scale genetic analyses had pegged their cultivation as happening between 15,000 and 400,000 years ago—a range implausibly wide, not least because, a few minor excursions aside, *Homo sapiens* left Africa only about 60,000 years before the present day.

This estimate of when grapes were first cultivated has now been pruned. In a study just published in *Science*, Chen Wei of Yunnan Agricultural University, in China, and a team of collaborators from across the world, have distilled a new picture. Grapevines were, it seems, domesticated on two occasions, in quick succession but in different parts of the world, about 11,000 years ago. That makes the old model so much noble rot. “Now that whole building just collapsed,” says Dr Chen.

The confusion was caused not by poor analysis but limited data. Indeed, one of Dr Chen’s own papers provided evidence for the 400,000 year figure, based on some 70 varieties of wild grapes from a small region of Germany. His new work tramples over such limitations by including over 3,500 varieties from the full terroir of existing viticulture: 1,000 or so wild; the remainder cultivated. Getting hold of that many samples was not easy. Dr Chen’s team relied on the good will of collaborators, enthused by the prospect of participating in a definitive study with generous funding, provided mostly by Chinese scientific bodies.

Kristina Margaryan, of the Institute of Molecular Biology in Armenia, for instance, spent weeks trekking with colleagues through her country’s hills, collecting what would later turn out to be hundreds of hitherto unknown varieties of wild grape. Elsewhere, researchers negotiated with vineyard owners to take samples from their precious vines.

Thousands of these were then sent to Dr Chen’s laboratory, where each had its DNA extracted, sequenced and fed into a supercomputer for analysis. This compared the sequences for each sample, looking for variations that would suggest evolutionary steps and, hence, familial links.

The results revealed that present-day grape varieties can be split into ten groups: four of wild *Vitis sylvestris* and six of cultivated *Vitis vinifera*. All arose from a protovine which split, some 200,000-400,000 years ago, into two varieties, Syl-E, which flourished in the Caucasus and Levant, and Syl-W, which grew across western Europe.

What happened next recalls another aspect of the biblical story: climate-change-induced selection. In this case it was not a flood, but a cooling. As temperatures declined through the last glacial period, and conditions became less hospitable, varieties in different regions evolved different mechanisms for survival. By 56,000 years ago, Syl-E had split into Syl-E1 and Syl-E2, with Syl-W following suit around 500BC.

The analysis also showed that around 11,000 years ago, a strain of Syl-E1 was cultivated somewhere near modern-day Israel that would become the ancestor of almost all today’s varieties. As well as spreading southward to north Africa and thence as far west as Morocco, it was also carried north to Anatolia, where, within the space of 500 years, it gave rise to a new family. The next big evolutionary milestone would come 8,000 years later, when new strains appeared in the Balkans and then, in quick succession, Iberia and modern-day France.

At almost exactly the same time that this story was beginning in the Middle East, a similar process was under way with Syl-E2 in modern-day Georgia. Because of the mountainous terrain, migration of this grape was more limited, so the varieties developed here remained more isolated. That did not stop its legend spreading. Noah’s vineyard was supposedly near Mount Ararat, in what is now north-east Turkey. “So now it isn’t legend,” says Dr Margaryan.

It may seem odd that grapes were domesticated twice, but simultaneous invention is hardly unheard of in the history of technology. Alternatively, perhaps, as news flowed between the Caucasus and the Levant, one budding innovator may have pinched another’s brainwave. It may even have been inadvertent. Perhaps they simply heard it through the grapevine. ■

Stone tools and Antarctica

Give us the tools

Antarctic rocks can help distinguish stone tools from natural lookalikes

ANTARCTICA IS SOMEWHERE archaeologists might be thought to have little business. After all, human beings did not reach it until 1821. Yet a study published in *Antiquity* by Metin Eren of Kent State University, in Ohio, argues it is worth their attention for precisely that reason.

A challenge faced by those archaeologists who study the Stone Age, particularly the Palaeolithic (which is the bulk of hominid history, including species such as *Homo neanderthalensis* and *Homo heildelbergensis*), is discerning whether things which might be stone tools, are, indeed, such. There are many cases when a rock identified as having been worked deliberately by hominid hand has subsequently been reclassified as a naturally produced object.

Is it or isn’t it?

Dr Eren and his colleagues thought it might thus be useful to assemble a library of tool-like rocks from a place where there was no chance that they could have been chipped at by humans or their ancestors. They turned to Antarctica because, not only was it reached only 200 years ago, but it also supports a variety of processes, including glacial erosion, frost cleaving and river transport, which might batter rocks into tool-like shapes.

Rather than visit the continent itself, they knocked on the doors of the Polar Rock Repository in Columbus, Ohio’s capital, where thousands of Antarctic rock samples are stored. They used the repository’s database to find specimens made of stuff—especially basalt, chert (of which the most familiar type is flint) and obsidian—that hominids had a penchant for working into tools before the development of bronze and iron. They then studied these in detail and identified 14 which they thought could easily have duped archaeologists into believing they had been made deliberately.

They argue in their paper that these specimens should form the core of a reference collection, with which doubtful discoveries could be compared. They also hope to add to this collection by similarly plundering the trove belonging to the British Antarctic Survey, in Cambridge. That would certainly help professional archaeologists. For amateurs who would like to try their eye at identifying whether the “tool” in the photograph is natural or artificial, the answer* is printed at the bottom of the page.

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*It is a real tool, from Spain, made 350,000 years ago by *Homo heildelbergensis.*

Culture

The British Empire

The sun never sets

Can the reputation of the British Empire be rehabilitated? Not on this evidence

Colonialism: A Moral Reckoning. By Nigel Biggar. *William Collins; 480 pages; $34.99 and £25*

For a professor of theology, Nigel Biggar has a sharp appetite for controversy. One of his previous books defended the concept of the "just war". In 2017 he set up a research project on "Ethics and Empire" at the University of Oxford. He was denounced for suggesting that it might be intellectually credible to re-evaluate the morals of the British Empire. To his critics, this did not sound like serious history. His latest book is an effort to set them straight.

True to form, "Colonialism: A Moral Reckoning" takes aim at the verities of the left-leaning academic establishment—in particular the modish academic discipline of post-colonial studies. The book is determinedly revisionist and provocative, often foolhardy and sometimes just banal.

Plenty of people in Britain's former colonies have long regarded the British Empire as racist and exploitative, even genocidal. What troubles Professor Biggar is that among British historians, too, it is now axiomatic to see the empire as a means to enslave and immiserate other peoples for the benefit of a small white elite. At times, and in places, he concedes, the empire was indeed some, if not all, of these things. But so were most empires throughout history. Unlike most others, he contends, British imperialists were often motivated by a strong sense of "Christian humanitarianism": a willingness to use their power and wealth to do good, even if that was not in their own interests.

This is a hoary way for Britons to fend off post-imperial guilt: however reprehensible they were, many told themselves for decades, someone else was worse. Self-serving as it seems, Professor Biggar wants to recover this sense of moral superiority. In that way, he writes, the empire can give those "who identify ourselves with Britain cause for lament and shame", but also "cause for admiration and pride".

Those last words will make many readers shudder. But the case must be made, the author insists, because only by taking pride in the "liberal, humanitarian principles and endeavours of the colonial past" can the British, along with Canadians, Australians and New Zealanders, remain confident in their roles as "important pillars of the liberal international order".

That is another startling claim—not least in assuming that a liberal international order still exists, and that Britain is a pillar of it. The historical evidence that underpins the argument is shoddy.

Somewhat astonishingly, exhibit A in Professor Biggar's defence of the empire is the slave trade. He knows Britain was heavily involved in this world-historical evil (as were their fellow Europeans, west Africans and others). But the British, he says, also resolved to abolish the trade, and ▸▸

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— Johnson is away

subsequently the institution of slavery itself. Recent historians have rightly focused on the role of slave rebellions in bringing about abolition in the Caribbean. Here Professor Biggar wants to rewind the clock and re-emphasise the input of white abolitionists, such as Thomas Clarkson, a devout British campaigner.

Most of these activists, he writes, were guided not by a sense that slavery had become uneconomical, but by moral outrage. In the late 18th century they were backed by an early boycott of a consumer product, namely sugar. After emancipation, Professor Biggar continues, Britain invested heavily in the suppression of the slave trade around the world (while paying a fortune in compensation to British former slave-owners). In some analyses, this effort reflected a wish to stop slaveholding economies undercutting British exporters, who now relied on free labour. The author disregards that motive. "For the second half of [the empire's] life," he trumpets, "*anti-slavery*, not slavery, was at the heart of imperial policy."

Ranging more widely, he takes on the common charge that the British were slow to introduce democracy and other civil rights in their overseas territories. In reality, he thinks, the pace of progress rarely lagged far behind that in Britain itself, as in the gradual extension of the franchise there. The survival of the empire, he argues, rested largely on the co-operation of millions of Indians, Africans and others. He does not dwell on the often divisive patronage that helped secure this acquiescence, nor on the fundamental lack of choice that citizens of the colonies faced, both of which were underpinned by force.

As for the widespread bloodshed and repression: with the tone of a dogged barrister, Professor Biggar tackles some of the most notorious incidents in a bid to show that, even at its worst, the empire was not "wantonly violent". For instance, he argues that the sacking in 1897 of Benin City in present-day Nigeria was in part justified by a desire to end slavery and human sacrifice there. In this account, the killing and looting that ensued were collateral damage.

These points often rely on a naive distinction between purportedly high-minded policymakers in Whitehall and the assorted settlers, adventurers and soldiers who (to take one example) shot people in India from cannons to discourage rebellion. To those on the receiving end of such brutality, it mattered little that some board of inquiry in London might later tut-tut—as happened in the case of the Amritsar massacre of 1919 (pictured on previous page), in which 379 peaceful Indians were killed by a trigger-happy British unit and hundreds more were wounded.

Professor Biggar seems unfazed by this cruelty and bloodlust, observing that "any long-standing state" harbours "evils and injustices". This is a lazy and banal defence, especially since he reckons this particular empire had higher moral standards than others. He also asks readers to believe the empire was not "essentially racist". Yet the entire edifice of colonial rule, from exclusive all-white men's clubs in imperial outposts, to the operation of justice and the courts, was founded on the alleged superiority of educated white men.

And as for the claim that liberal internationalism grew out of what the empire got right: for what it is worth, that creed owes much more to intellectual traditions and luminaries, such as George Orwell, that were opposed to imperialism, than it does to those who thought the empire could be a force for good. In a spirit of open inquiry, it is fair to question contemporary orthodoxy about the British and other empires. But Professor Biggar goes much too far. ■

Campus fiction

Old school ties

I Have Some Questions for You.
By Rebecca Makkai. *Viking; 448 pages; $28. Fleet; £16.99*

IN THE BLEAK midwinter of 2018, Bodie Kane, a 40-year-old film professor and podcaster, returns to the Granby School, her alma mater in New Hampshire, to teach for a fortnight. On the first day of her podcasting course, she asks her students to work on a project related to the past or present of Granby. One of them, Britt, chooses the killing in 1995 of Thalia Keith, a pretty, rich, popular white pupil—and Bodie's former room-mate.

Omar Evans, the boarding school's black athletics coach, was convicted of the murder. Britt thinks he is innocent and has been unjustly imprisoned for nearly 23 years. Bodie, also sceptical of the verdict, is glad a fresh pair of eyes is looking at the case: "I wanted second sight. I wanted the ability to remember things I was never there for."

As a campus novel and murder mystery set in New England, Rebecca Makkai's latest book, "I Have Some Questions for You", has echoes of "The Secret History". Unlike Donna Tartt's blockbuster, the story is a whodunnit not a whydunnit, the intrigue and drama crescendoing as Bodie becomes increasingly obsessive about the crime. She makes inquiries of her own into Thalia's death by tracing last movements, evaluating suspects and sifting alibis.

Other, equally involving plots unfold. As Bodie tries to right a wrongful conviction, she wrestles with demons of her own, from losing both her father and brother in childhood to her unhappy years at Granby. When her husband Jerome, an artist, is accused of predatory behaviour, she comes to his defence and finds herself embroiled in scandal.

Ms Makkai makes clear how her protagonist's life has been shaped by men's nasty behaviour. Bodie reveals how, at school, she was the victim of a prolonged campaign of sexual harassment. She discusses a podcast she made on Hollywood actresses and "the ways the industry chewed them up and spat them out". She offers potted summaries of cases in which women suffered at the hands of men: "It was the one where the woman who stabbed her rapist with scissors was the one who ended up in jail. It was the one where the star had a secret button to lock the doors."

The book is particularly compelling when Bodie interrupts her narrative at routine intervals to address the "you" of the novel's title. "You, a big part of what went wrong" is Denny Bloch, who was once her favourite teacher. One of Bodie's friends considered him a "creeper". As the evidence mounts up, Bodie wonders whether he might be "a more violent kind of monster".

This novel lacks the emotional punch of Ms Makkai's previous book, "The Great Believers" (published in 2018), which charted the history of the AIDS epidemic of the 1980s. Instead, it is at once a propulsive crime story and a thought-provoking meditation on sex, race and the abuse of power.

Morality in wartime

Double lives

The Collaborators. By Ian Buruma. *Penguin Press; 320 pages; $30. Atlantic Books; £20*

When nations are licking the wounds of war and occupation, they tell and retell the stories of people who resisted heroically. Equally strong is the instinct to anathematise the accursed characters who colluded with the foe. Focusing on both extremes can be a way for ordinary folk to set aside their own behaviour, which was often somewhere in the middle. Yet even seemingly egregious collaborations can have complex motives and results.

That, broadly, is the theme that holds together these three stories of the second world war, told in intricate but fascinating detail by Ian Buruma, a prolific Dutch-born chronicler of modern times. All three of his subjects are elusive, tantalising targets because they were serial myth-makers and encouraged others to weave fantastical tales around them, leaving questions hanging in the air long after their lifetimes. All three grew up in contested environments where the ability to manipulate narratives seemed indispensable.

The one certain thing is that they co-operated with the Axis powers. Felix Kersten was the masseur and confidante of Heinrich Himmler, commander of the SS. Born in tsarist Estonia to Baltic Germans, he was naturalised in Finland and had to negotiate the complex inter-war contests over that country's future. Friedrich Weinreb came from a modest Jewish family which in 1915 sought security in the sophistication of Vienna—but felt despised by the city's more prosperous Jews, as well as threatened by the anti-Semitism that was already rising in central Europe. His family settled in the Netherlands.

The third subject, mostly known by her adopted name of Kawashima Yoshiko, was the daughter of a princely Chinese family. Cut adrift by the dynasty's overthrow in 1912, she moved to Japan and found succour where she could. First she married a Mongolian; later she offered services, sexual and strategic, to a Japanese officer while herself keeping a Japanese woman in servitude. With a penchant for male uniform, she at one point commanded an equestrian army of ruffians for Manchuria's Japanese occupiers. In Japan's propaganda, she was a new Joan of Arc.

All three tried to turn vulnerability into power. As the only person who could ease Himmler's aches and pains, Kersten later claimed that he used this cosy relationship to ward off some horrific possibilities—such as a plan to deport eastwards the entire Dutch population in 1941. As the book shows, the Nazis never had any such intention. But some assertions he made in self-defence have greater standing: for example, that by arranging a meeting between Himmler and a member of the World Jewish Congress in 1945, he saved the lives of many Jews still in Nazi captivity.

Weinreb's deception was grosser. During the occupation of the Netherlands he took money from thousands of Jews by claiming, falsely, that he could use high-level German contacts to guarantee their escape. He would later maintain that he had kept people's hopes alive as liberation loomed; an official investigation found his self-justifying arguments to be nonsense.

Yoshiko was captured by the nationalist Chinese government and executed in 1948. Yet by her own peculiar lights, she was not a traitor. Instead her service to the Japanese occupiers of Manchuria was an element in a wider, well-choreographed initiative to restore, at least partly, the fallen Chinese dynasty, which included the re-coronation of the ousted Emperor Puyi, albeit as a Japanese puppet.

Of the three, Yoshiko was the most flamboyant, Kersten the subtlest, Weinreb the most gratuitously destructive. Yet even he had defenders. His claim to have been a friend to Dutch Jews was plausible enough that some people never ceased to admire him. If this book reveals something new about lives led in ambivalence, it is that the impulse to behave dishonestly—deceiving others, and very often, yourself—sets in early and never goes away. ■

American ceramics

Wheels of fire

NEW YORK

Two shows highlight the artistry of 19th-century African-American potters

The couplets, incised in a lively cursive when the clay was still wet, leap from the jars. They wrap around the big-bellied pots just beneath their rims, as if anticipating their fullness once packed with cured meats, lard or pickled cucumbers. The verses that appear on some of the 40 surviving "poem jars" are joyful, even humorous. "When you fill this jar with pork or beef", reads one, "Scot will be there; to get a peace." Keep circling around the brown jars, and near the potter-poet's signature—"Dave"—he has etched the initials "Lm". These stand for Lewis Miles, his enslaver.

Drake's art of subversion

Miles's pottery business was one of many that flourished in the clay-rich area of Edgefield, South Carolina, between 1810 and 1880. They used slave labour to dig clay, mix glazes and chop and lug wood to fire kilns—but also for the highly skilled work of turning pots on the wheel. The fact that early American stoneware is bound up with industrial slavery, a lesser-known model than the agricultural kind, may be news to visitors at a major exhibition of David Drake's jars. Twelve feature in a show of pre-civil war ceramics that began at the Metropolitan Museum of Art in New York last autumn and opens in March at the Museum of Fine Arts in Boston.

Drake is remarkable for several reasons. He is the only enslaved potter with a known body of work. South Carolina outlawed literacy for African-Americans in 1834. Yet he wrote on his pieces—including a jar on which he cut one word, "Concatination", which scholars think refers to the state of being chained. Several of his poems are, in this way, doubly subversive. "Nineteen days before Christmas Eve", Drake inscribed on another jar; "Lots of people, after its over, how they will greave." That is a reference to the practice of selling or leasing slaves on New Year's Day to settle debts, which split up families.

Such vessels, some as large as 40 gallons (150 litres), were produced to store rationed food for enslaved workers on local plantations. That context imbues the exuberance and optimism of Drake's poems with defiance. His dexterity as a potter is clear: no one else in Edgefield made jars so big. He combined the techniques of wheel-throwing and coiling, and experimented with glazes to produce varying textures and colours, from moss green to ochre.

A decade ago Drake's work was relatively unknown, but recognition has come swiftly. In 2021 a 25-gallon jar he made sold at auction for more than $1.5m—the highest-ever price for American pottery and almost double the previous record, set by a ▸▸

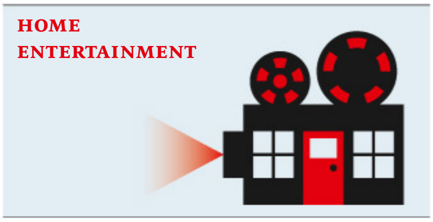
teapot made by John Bartlam, a white potter who produced America's first porcelain in South Carolina's potteries. When the Met acquired the jar that refers to "Scot" in 2020, its director said the addition was "truly transformative" for the museum's American collection.

In a sign of museums' surging interest in African-American artistry, a second show of a 19th-century black potter's work opened this winter at the New-York Historical Society. It is the first dedicated to Thomas Commeraw. Like Drake, Commeraw made thousands of functional pots, of which 22 are on display. He worked in New York, another centre of American stoneware production, near plentiful clay beds in New Jersey and Long Island. But unlike Drake, Commeraw was free. He spoke out about the unequal treatment of the city's black residents, petitioning the state legislature to incorporate a black mutual-aid society that he helped establish.

The Met acquired a Commeraw pot over a century ago, though for years he was assumed to be a white potter of European descent. His glossy grey vessels, salt-glazed and decorated in blue with cobalt oxide, followed a style imported by German potters. Among the first of those were the Crolius family who enslaved Commeraw and his parents. Only in 2003 did an auction house discover from a 19th-century census that Commeraw was black. Freed as a child, he was the only black master-potter in New York in the early 1800s. He owned his home and workshop, on Manhattan's Lower East Side. Few white potters did so then.

By 1810 six in seven black New Yorkers were free, a rapid shift from two decades earlier when a majority were slaves. But slavery was not abolished in the city until 1827, and discrimination was rife. Trade societies excluded black artisans. So Commeraw traded with the harbour's black oystermen, who dominated that brisk business and needed jars in which to hawk their oysters—all the rage among New Yorkers, who ate them fried, pickled and raw. He also sold his wares to middle-class homes and upscale boarding houses: jars for preserving plums, quince and molasses, jugs for cider, kegs and butter churns.

Research into Drake and Commeraw is ongoing; some artefacts were found only recently, including a jar by Commeraw that came to light in 2013 during water-mains works in Manhattan. The Drake show is rounded out by pieces made by five black artists working today. One of them, Adebunmi Gbadebo, uses indigo dye, Carolina Gold rice, black human hair and clay dug from the plantation where her ancestors were enslaved. The result is a startling series of works examining land and memory in the American South. As these shows demonstrate, there is still much more history to unearth. ■



The art of mime

Speaking silence

Marcel Marceau was a giant of an underappreciated art form

SAY "MIME" and the name that comes to mind is Marcel Marceau. Despite a long history that embraces Greek tragedy and Roman farce, it is a much-derided form of art. Its silent exponents, clowns you can't hear coming, are the butt of a memorably dismissive sketch by Gary Larson, an American cartoonist: "If a tree falls in the forest and no one's around, and it hits a mime, does anyone care?"

Marceau, who was born 100 years ago in March 1923, is an outlier, admired for a rare ability to transform his body. Yet he, too, is underappreciated—today synonymous with his most famous creation, a chalk-faced clown called Bip who sported a striped jumper and a crumpled stovepipe hat topped with a limp red flower. First presented in 1947, Bip was part harlequin, part homage to Charlie Chaplin's melancholy bumbler, the Little Tramp. His sad looks and elastic gestures would become a cliché, aped by every street performer who has wrestled with the wind or opened an imaginary door.

In fact Marceau was a complex artist, scarred by adolescent upheaval. He was born Marcel Mangel, into a Jewish family in Strasbourg, and as a child revelled in drawing and gymnastics. In 1939, ahead of the invasion by Nazi Germany, his home town was evacuated. At the urging of a cousin he joined the French Resistance, and his enthusiasms proved invaluable: he altered the documents of Jewish children and posed as a Boy Scout to smuggle others into Spain and Switzerland. (He used mime to encourage the youngsters to stay quiet en route.) He did not manage to save his father, who was arrested by the Gestapo in 1944 and died in Auschwitz.

That year Marceau put on his first public entertainment as a mime, for a crowd of 3,000 American soldiers. Though his compositions could be intensely funny, they also paid oblique tribute to those who had been silenced during the bloodshed. It was a tour of America in 1955-56 that brought him celebrity, and over the next half century he performed in more than 80 countries, clocking up as many as 300 solo shows a year and introducing a global audience to his brand of vivid yet fleeting poetry.

Marceau's subject matter ranged widely: pride, solitude, sin and the pathos of old age, as well as adaptations of Nikolai Gogol, Franz Kafka and Voltaire. When he enacted the Earth's creation his fingers became birds and fish. In a piece called "The Tribunal" he played defendant, jury, judge and executioner. His work for the big screen never quite captured the lyrical expressiveness of his stage act. His most notable moment on film came in 1976, uttering the one word spoken in Mel Brooks's "Silent Movie"—"Non!"

Offstage, Marceau was loquacious and in demand as a chat-show raconteur. On it he was a model of lithe discipline and an inspiration to other theatre practitioners, showing how an art form that often favours text and talk could profit from the eloquence of the body. Reflecting on the power of his chosen medium, he wondered: "Do not the most moving moments of our lives find us without words?" ■

Property

Val di Fassa, Italy

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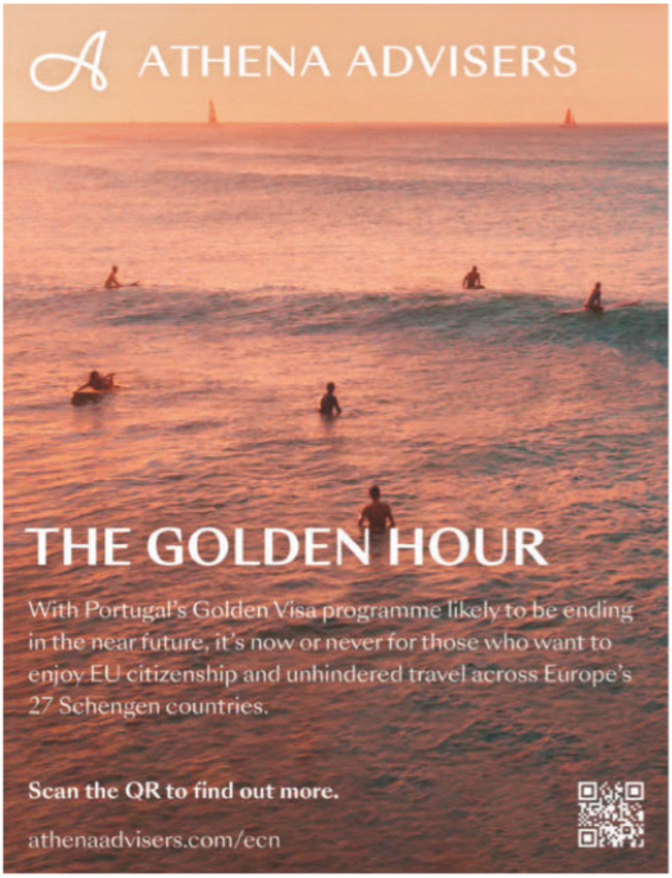

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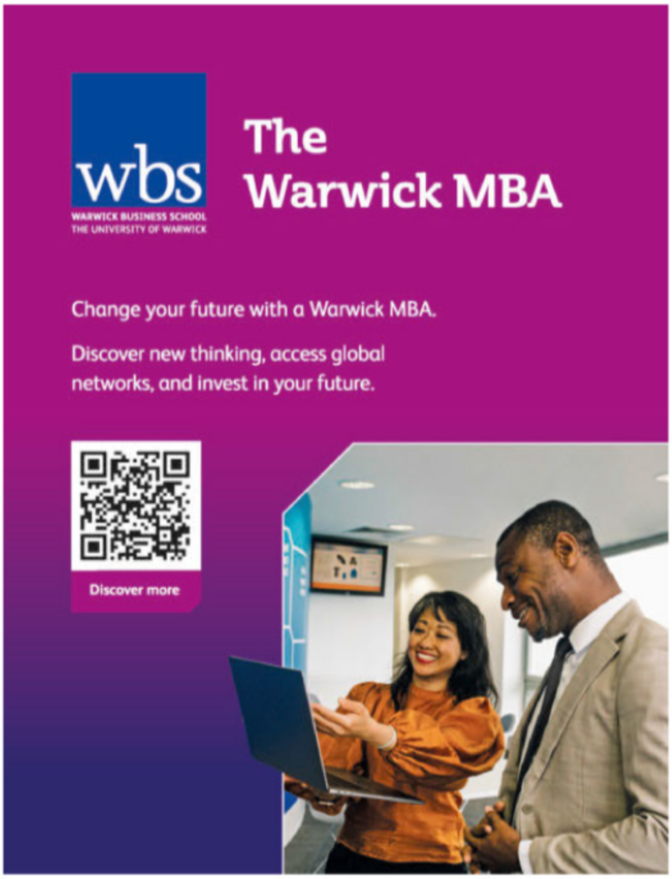

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- Approximately 1,250.00 wmt of Artana Lead concentrate

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Economic & financial indicators

Economic data

	Gross domestic product				Consumer prices			Unemployment rate		Current-account balance	Budget balance	Interest rates			Currency units	
	% change on year ago				% change on year ago			%		% of GDP, 2023†	% of GDP, 2023†	10-yr gov't bonds		change on	per $	% change
	latest		quarter*	2023†	latest		2023†					latest,%		year ago, bp	Mar 1st	on year ago
United States	0.9	Q4	2.7	0.7	6.4	Jan	4.0	3.4	Jan	-3.0	-5.2	4.0		229	-	
China	2.9	Q4	nil	5.7	2.1	Jan	2.2	5.5	Jan‡§	1.9	-4.1	2.7	§§	20.0	6.89	-8.4
Japan	0.6	Q4	0.6	1.0	4.4	Jan	1.9	2.5	Dec	3.0	-5.9	nil		-8.0	136	-15.7
Britain	0.4	Q4	0.1	-0.3	10.1	Jan	5.9	3.7	Nov††	-3.2	-5.9	3.8		236	0.83	-9.6
Canada	2.1	Q4	nil	0.5	5.9	Jan	3.6	5.0	Jan	-0.3	-3.4	3.4		171	1.36	-6.6
Euro area	1.9	Q4	0.4	0.7	8.6	Jan	6.0	6.6	Dec	1.0	-3.6	2.7		282	0.94	-4.3
Austria	2.6	Q4	-0.1‡	0.8	11.2	Jan	6.6	5.0	Dec	nil	-3.7	3.4		305	0.94	-4.3
Belgium	1.4	Q4	0.4	0.4	6.6	Feb	6.1	5.5	Dec	-1.9	-5.3	3.3		287	0.94	-4.3
France	0.5	Q4	0.3	0.5	6.2	Feb	5.0	7.1	Dec	-1.9	-5.3	3.0		234	0.94	-4.3
Germany	0.9	Q4	-1.7	-0.1	8.7	Feb	6.8	2.9	Dec	3.4	-2.0	2.7		282	0.94	-4.3
Greece	2.1	Q3	-2.1	1.0	7.0	Jan	3.9	11.6	Dec	-6.0	-3.5	4.5		219	0.94	-4.3
Italy	1.7	Q4	-0.5	0.6	10.0	Jan	6.8	7.8	Dec	-0.4	-4.7	4.6		319	0.94	-4.3
Netherlands	3.0	Q4	2.5	0.7	7.6	Jan	7.1	3.6	Jan	6.3	-2.7	3.0		288	0.94	-4.3
Spain	2.7	Q4	0.9	1.4	6.1	Feb	4.3	13.1	Dec	0.3	-4.7	3.6		242	0.94	-4.3
Czech Republic	1.6	Q3	-1.2	-0.2	17.5	Jan	9.9	2.2	Dec‡	-1.0	-4.6	5.0		196	21.9	3.5
Denmark	1.7	Q4	3.5	0.8	7.7	Jan	5.0	2.7	Dec	9.0	0.5	3.0		273	6.97	-4.2
Norway	1.3	Q4	0.8	1.4	7.0	Jan	4.6	3.4	Dec‡‡	20.0	11.4	1.4		76.0	10.4	-14.9
Poland	0.6	Q4	-9.3	1.3	17.2	Jan	12.6	5.5	Jan§	-1.9	-3.0	6.6		254	4.38	-3.4
Russia	-3.7	Q3	na	-2.4	11.8	Jan	7.3	3.6	Jan§	6.8	-4.6	10.8		-170	75.1	48.8
Sweden	-0.8	Q4	-3.5	0.1	11.7	Jan	5.6	7.6	Jan§	3.0	-0.3	2.7		215	10.4	-8.3
Switzerland	0.8	Q4	0.1	0.9	3.3	Jan	2.2	1.9	Jan	6.5	-0.7	1.5		127	0.94	-2.1
Turkey	3.5	Q4	3.8	3.1	57.7	Jan	40.8	10.4	Dec§	-4.3	-2.4	10.3		-1269	18.9	-26.1
Australia	2.7	Q4	1.9	1.6	7.8	Q4	3.8	3.7	Jan	1.9	-2.2	3.8		161	1.48	-6.8
Hong Kong	-4.2	Q4	nil	3.4	2.4	Jan	2.3	3.4	Jan‡‡	3.7	-0.5	3.9		210	7.85	-0.4
India	4.4	Q4	-3.4	5.4	6.5	Jan	5.3	7.5	Feb	-1.4	-5.9	7.4		66.0	82.5	-8.7
Indonesia	5.0	Q4	na	4.6	5.5	Feb	3.9	5.9	Q3§	0.6	-2.3	6.8		35.0	15,235	-5.9
Malaysia	7.0	Q4	na	3.9	3.7	Jan	2.3	3.6	Dec§	2.3	-5.1	3.9		25.0	4.47	-6.3
Pakistan	6.2	2022**	na	2.2	31.5	Feb	9.9	6.3	2021	-4.9	-5.4	15.6	†††	456	265	-33.1
Philippines	7.2	Q4	10.0	4.8	8.7	Jan	5.7	4.5	Q4§	-3.0	-6.4	6.4		108	55.0	-6.8
Singapore	2.1	Q4	0.3	1.7	6.6	Jan	3.1	2.0	Q4	17.3	-0.4	3.3		144	1.34	1.5
South Korea	1.3	Q4	-1.5	1.3	5.2	Jan	2.8	3.6	Jan§	2.7	-2.4	3.8		107	1,323	-9.1
Taiwan	-0.4	Q4	-1.5	2.2	3.0	Jan	1.6	3.6	Jan	12.2	-2.0	1.2		50.0	30.6	-8.3
Thailand	1.4	Q4	-5.9	3.8	5.0	Jan	2.2	1.0	Dec§	2.1	-2.6	2.7		73.0	34.8	-6.2
Argentina	5.9	Q3	7.0	-0.2	98.8	Jan	90.6	7.1	Q3§	-1.0	-3.9	na		na	198	-45.6
Brazil	3.6	Q3	1.6	1.0	5.8	Jan	4.8	7.9	Dec§‡‡	-3.0	-8.1	13.5		216	5.19	-0.8
Chile	0.3	Q3	-4.6	-0.6	12.3	Jan	7.5	8.0	Jan§‡‡	-4.3	-2.6	5.8		2.0	813	-1.5
Colombia	2.9	Q4	2.7	1.6	13.3	Jan	9.7	13.7	Jan§	-4.5	-4.4	13.1		374	4,873	-20.1
Mexico	3.6	Q4	1.8	1.1	7.9	Jan	5.9	3.0	Dec	-1.2	-3.8	9.3		135	18.1	13.1
Peru	1.7	Q4	-6.0	1.9	8.6	Feb	6.9	8.8	Jan§	-3.7	-1.7	8.1		203	3.78	nil
Egypt	4.4	Q3	na	3.0	25.9	Jan	19.2	7.2	Q4§	-2.9	-6.5	na		na	30.6	-48.7
Israel	2.9	Q4	5.8	3.0	5.4	Jan	3.4	4.3	Jan	4.0	-2.3	4.0		211	3.62	-11.1
Saudi Arabia	8.7	2022	na	2.8	3.4	Jan	2.2	5.8	Q3	6.5	1.6	na		na	3.75	nil
South Africa	4.1	Q3	6.6	1.3	7.2	Jan	5.1	32.7	Q4§	-1.9	-4.8	10.1		59.0	18.2	-15.5

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

In local currency	Index Mar 1st	% change on: one week	% change on: Dec 30th 2022
United States S&P 500	3,951.4	-1.0	2.9
United States NAScomp	11,379.5	-1.1	8.7
China Shanghai Comp	3,312.4	0.6	7.2
China Shenzhen Comp	2,163.8	0.2	9.5
Japan Nikkei 225	27,516.5	1.5	5.4
Japan Topix	1,997.8	1.1	5.6
Britain FTSE 100	7,914.9	-0.2	6.2
Canada S&P TSX	20,259.8	0.3	4.5
Euro area EURO STOXX 50	4,215.8	-0.6	11.1
France CAC 40	7,234.3	-0.9	11.7
Germany DAX*	15,305.0	-0.6	9.9
Italy FTSE/MIB	27,315.1	0.8	15.2
Netherlands AEX	749.4	-1.0	8.8
Spain IBEX 35	9,322.9	1.6	13.3
Poland WIG	60,502.1	3.1	5.3
Russia RTS, $ terms	955.8	2.8	-1.5
Switzerland SMI	11,056.1	-2.2	3.0
Turkey BIST	5,322.7	5.0	-3.4
Australia All Ord.	7,456.1	-0.8	3.2
Hong Kong Hang Seng	20,619.7	1.0	4.2
India BSE	59,411.1	-0.6	-2.3
Indonesia IDX	6,844.9	0.5	-0.1
Malaysia KLSE	1,450.2	-0.9	-3.0

	index Mar 1st	% change on: one week	% change on: Dec 30th 2022
Pakistan KSE	40,412.8	-1.8	nil
Singapore STI	3,255.1	-1.4	0.1
South Korea KOSPI	2,412.9	-0.2	7.9
Taiwan TWI	15,598.5	1.2	10.3
Thailand SET	1,620.0	-2.4	-2.9
Argentina MERV	249,580.4	2.0	23.5
Brazil BVSP*	104,384.7	-2.6	-4.9
Mexico IPC	53,473.5	0.5	10.3
Egypt EGX 30	17,123.0	2.1	17.3
Israel TA-125	1,737.0	-1.6	-3.6
Saudi Arabia Tadawul	10,192.3	-0.8	-3.4
South Africa JSE AS	78,631.4	0.6	7.6
World, dev'd MSCI	2,706.8	-0.9	4.0
Emerging markets MSCI	984.2	0.2	2.9

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 30th 2022
Investment grade	151	154
High-yield	451	502

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist **commodity-price index**

2015=100	Feb 21st	Feb 28th*	% change on month	% change on year
Dollar Index				
All Items	161.2	156.1	-3.9	-17.8
Food	144.5	141.0	-0.9	-14.5
Industrials				
All	176.8	170.2	-6.1	-20.2
Non-food agriculturals	126.2	125.4	-6.6	-34.3
Metals	191.8	183.4	-6.0	-16.6
Sterling Index				
All items	202.7	196.8	-2.3	-9.4
Euro Index				
All items	167.3	163.2	-1.6	-13.7
Gold				
$ per oz	1,835.6	1,826.0	-5.3	-5.2
Brent				
$ per barrel	83.1	84.0	-1.3	-20.0

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit
economist.com/economic-and-financial-indicators

Power of the pew

Places with high religious participation suffer fewer deaths of despair

IN 2015 Anne Case and Angus Deaton published a landmark paper on death rates in America. The economists found that mortality had been rising among middle-aged whites, thanks to a surge in drug overdoses, alcohol-related illness and suicides—causes they deemed "deaths of despair".

Other scholars have asked whether this category is useful. One study by congressional researchers in 2019 found that 70% of the rise in deaths-of-despair rates came from drugs alone. It also showed that the rise in mortality did not coincide with increasing economic malaise or self-reported unhappiness. Were these untimely deaths really evidence of anguish, or merely the result of a raging opioid epidemic?

A new paper by Tyler Giles of Wellesley, Daniel Hungerman of Notre Dame and Tamar Oostrom of Ohio State bolsters the case that deaths of despair stem in part from weakening social ties. It shows that mortality from these causes among middle-aged whites stopped falling around 1990—well before the rise in opioid use.

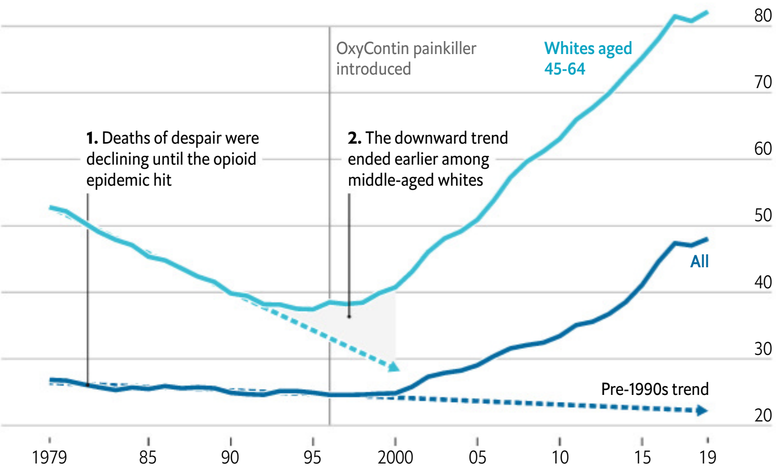
What changed at that time? The authors studied attendance at religious services. They found that states with more participation had fewer deaths of despair, and that the faster religious attendance fell in a state, the more such deaths rose. A paper in *JAMA* in 2020 also showed that of 110,000 health workers, those who went to services were less likely to die from these causes.

This pattern does not prove that religious participation wards off deaths of despair. But the authors tried to isolate the impact of religion by studying blue laws, which banned commerce on Sundays to encourage churchgoing. Whenever a state repealed a blue law, religious attendance tended to plummet, creating a natural experiment. And sure enough, deaths of despair rose unusually quickly in the few years following these repeals. Although legalising alcohol sales on Sundays may account for some of this trend, the biggest increase in mortality came from suicides.

Strikingly, the study found that private prayer was not linked to lower deaths of despair. This suggests that the risk reduction stems not from belief, but rather from the interpersonal connections that organised religion provides. Although secular groups like charities or labour unions also produce such "social capital", the *JAMA* authors say that faith-based networks provide unusually potent protection. ■

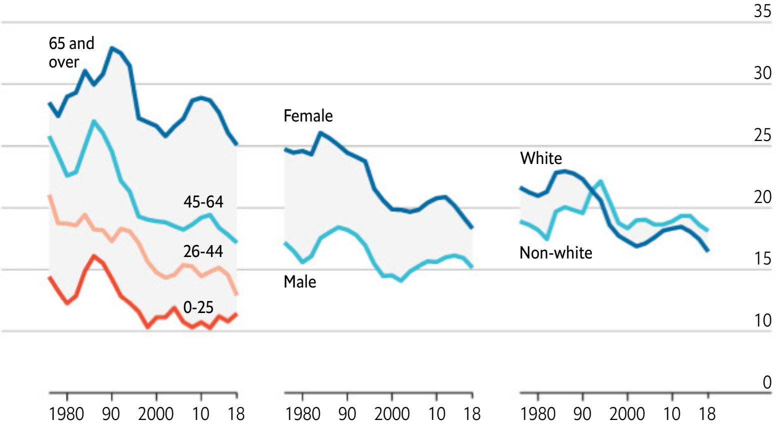
→ Deaths of despair among middle-aged whites stopped falling before opioids

United States, deaths of despair* per 100,000 people



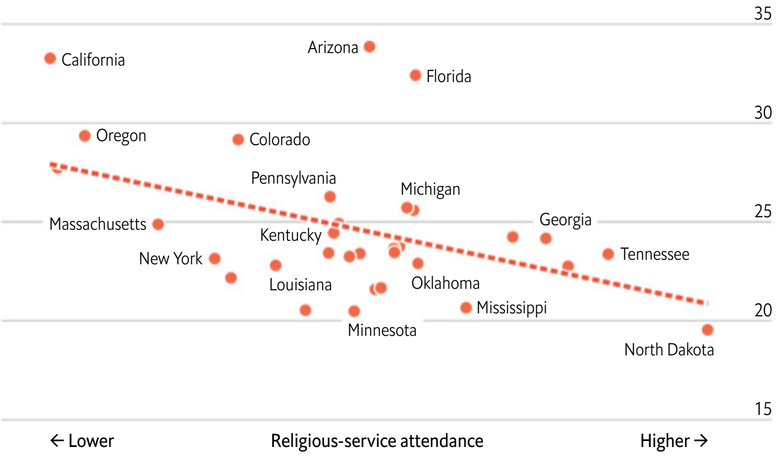
→ Attendance at religious services declined during the same period

Share attending religious services at least once a week, %
United States, six-year moving average†



→ Deaths of despair were highest in states with thinly attended churches

United States, 1986-88



*Suicide, drug overdoses or alcohol-related †Data not available for every year Source: "Opiates of the masses? Deaths of despair and the decline of American religion", by T. Giles, D.M. Hungerman and T. Oostrom, NBER, 2023, working paper

No-nonsense times two

Sir Bernard Ingham and Betty, Baroness Boothroyd died on February 24th and 26th respectively, aged 90 and 93

THE COUNTY of Yorkshire, in northern England, is not only God's own, as most residents think. It is also home to a breed of folk who judge themselves tougher, blunter, more hard-working and more bloody-minded than the average Briton, and often this is true. Bernard Ingham and Betty Boothroyd, both natives of the industrial West Riding, might have come from Yorkshire central casting: she glamorous and loud, once described as a cross between a diva, a headmistress and a barmaid; he resembling the permanently narked referee of a small-town football match, with only his huge eyebrows to keep him from the nithering rain.

Both, however, followed the Yorkshire tradition of seeking fame and fortune in the soft south; and there, having climbed up patiently through the ranks, both forged stellar political careers. Mr Ingham became, in 1979, Margaret Thatcher's press officer, and thus—because his boss took no interest in presenting policy, dealing with media or even reading the papers—the chief explainer and defender of Thatcherism as it evolved. He stayed to the bitter end, and she said she could never have done without him. Miss Boothroyd became the first female Speaker of the House of Commons and the first elected since Parliament was regularly televised, serving from 1992 to 2000 and keeping her boisterous charges in better order than many men had managed.

Both understood—and would be stupid not to, Miss Boothroyd said—that they were public performers. She began by declaring "Call me Madam!" and rejecting the Speaker's traditional long wig for her own perfectly good hair, to be comfortable. She designed her robes herself, gold Tudor roses on navy silk, to look the part. In a voice made deep and lovely by moorland water and 20 a day, she would cry: "Order! Order! The honourable gentleman will resume his seat immediately! Immediately! *Immediately!*" When members wasted time she would yawn, or fan herself with her order paper, or, on one occasion, snap "Come on, Mr ---! Spit it out!"

Mr Ingham, too, relied on anger. His volcanic soul exploded regularly down the phone or at the twice-daily unattributable briefings he gave to the lobby, the band of journalists covering Parliament. Trick questions and attempted traps drove him mad. Conspiracy theories made him furious. They were "Bunkum and balderdash!" "A load of rubbish!" or simply "Codswallop!" The least quiver of those eyebrows would send a thrill of fear through some reporters. Yet the crimson fury would subside quickly enough, with no grudges borne. He saved himself a deal of stress by insisting that all information given to the press went through him, not via random ministers and departments. Ministers grumbled about a power grab. He called it simple professionalism.

Lurking behind these shows was plenty of human sympathy. Both performers knew what it was to struggle, whether to make a point in Parliament or to get a good story. Mr Ingham had worked from 16 on the *Hebden Bridge Times* and later the *Yorkshire Post*, covering perishing funerals and sodden agricultural shows, doggedly doorstepping for details of some tragedy. Even at the *Guardian* in the 1960s and 1970s he had felt unappreciated. Miss Boothroyd, once her ambitions rose beyond dancing with the Tiller Girls or window-dressing a draper's shop, contested four seats until she succeeded in 1973 in West Bromwich. Selectors and voters alike thought she stood no chance, as a woman, unless she was married, had children and peeled potatoes every day. She never married, instead treating her constituents as family for 27 years.

Mill-town unemployment had scarred both of them. They knew about poverty, and imbibed staunch Labour politics from their cloth-worker parents. Both joined the Labour Youth League and ran for council seats. This politics bug was like miner's coal-dust under her fingernails, said Miss Boothroyd; you couldn't scrub it out. It drove her into campaigning, in America for Kennedy as well as at home, and spurred Mr Ingham to make his way steadily up through the civil service in Whitehall. At different points both of them worked for Barbara Castle, a stalwart of mid-century Labour governments. But at the peak of their careers both took on jobs that, at least on paper, demanded impartiality.

This was far harder for Mr Ingham. He was not a political appointee, but a career civil servant who now found himself voicing the opinions of a most determined Conservative. And voice them he did, reading Thatcher's mind like a book. He explained it thus. First, she was his boss, to whom loyalty was owed. Second, she was another abrasive outsider, like himself. Third, her love of country inspired him. He had also soured on the trade unions, and thought her economic plans were worth at least a try. Lastly, it was time for Britons to rediscover good old-fashioned personal responsibility. As folk said in Hebden Bridge, they should "buckle to".

He also set strict rules. To the lobby he offered facts, not spin. Spin, to him, was a black art. He controlled the flow of stories, as was sensible. But he did not analyse, comment or influence policy, and only occasionally let slip something that undermined a minister, because Thatcher intended to. Those who thought him a tub-thumping Thatcherite, and many did, were mistaken. Facts were his watchword; as, in the House of Commons, parliamentary rules were for Miss Boothroyd. She too was accused of party favouritism, for Labour, when choosing whom to call. But all she cared to do, in the place she loved best in the world, was to impose on that unruly bunch the code of practice laid down in 1844 by Erskine May, with strictures of her own: no clapping, no pagers, no bad language. Between them, they kept democracy briskly flowing.

In retirement both remained bossy: she privately, upbraiding her successors by telephone, and he publicly, with increasingly intemperate columns in the *Yorkshire Post* and the *Daily Express*. His chief joy was his county, which he extolled in several books. In 2005 he included her in "Yorkshire Greats: The County's Fifty Finest". She was flattered to have been included among the few living subjects and the mere five women. She was less thrilled, though, to find herself keeping company with Guy Fawkes. ■

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